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# The OIL and GAS JOURNAL

PRODUCING REFINING MARKETING

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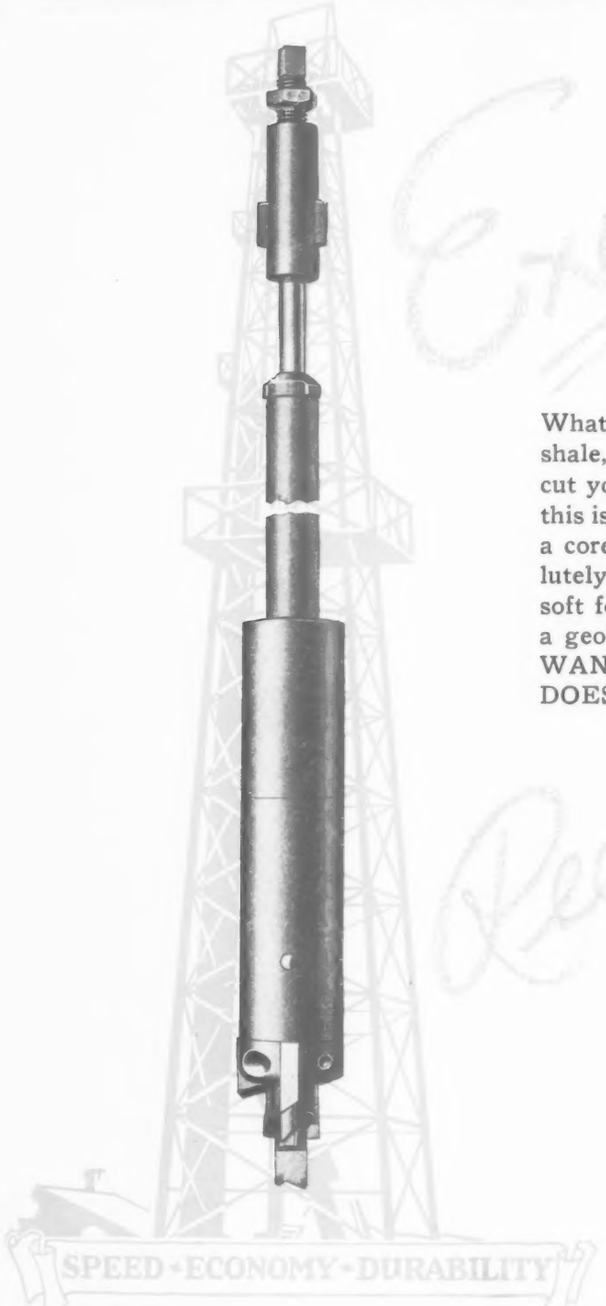
WICHITA, KANSAS

Advertisers' Index on Page 33 Table of Contents on Page 34

# Shows You A Core That Tells The Tale



Whatever the formation—chalk, anhydrites, shale, sand or gumbo—this Coring Tool will cut you cores that are absolutely NET. For this is a sure means of bringing to the surface a core absolutely uncontaminated and absolutely unwashed, even from soft and semi-soft formations! What it shows you is what a geologist, an oil engineer, or any driller WANTS to see — and seldom does — but DOES using the

## coring tool

The tool is 10 feet long, and the core it delivers is 7 to 8 feet in length. Depending on the cutting diameter you buy, the core diameter is from 1¼ to 3⅛ inches. Setting up and operating the Reed Coring Tool is the simplest routine; and the tool's extra-heavy construction makes it just about impossible to get it out of order. Its price is no hindrance. Write in for catalog description and detailed pictures of the Coring Tool Assembly.

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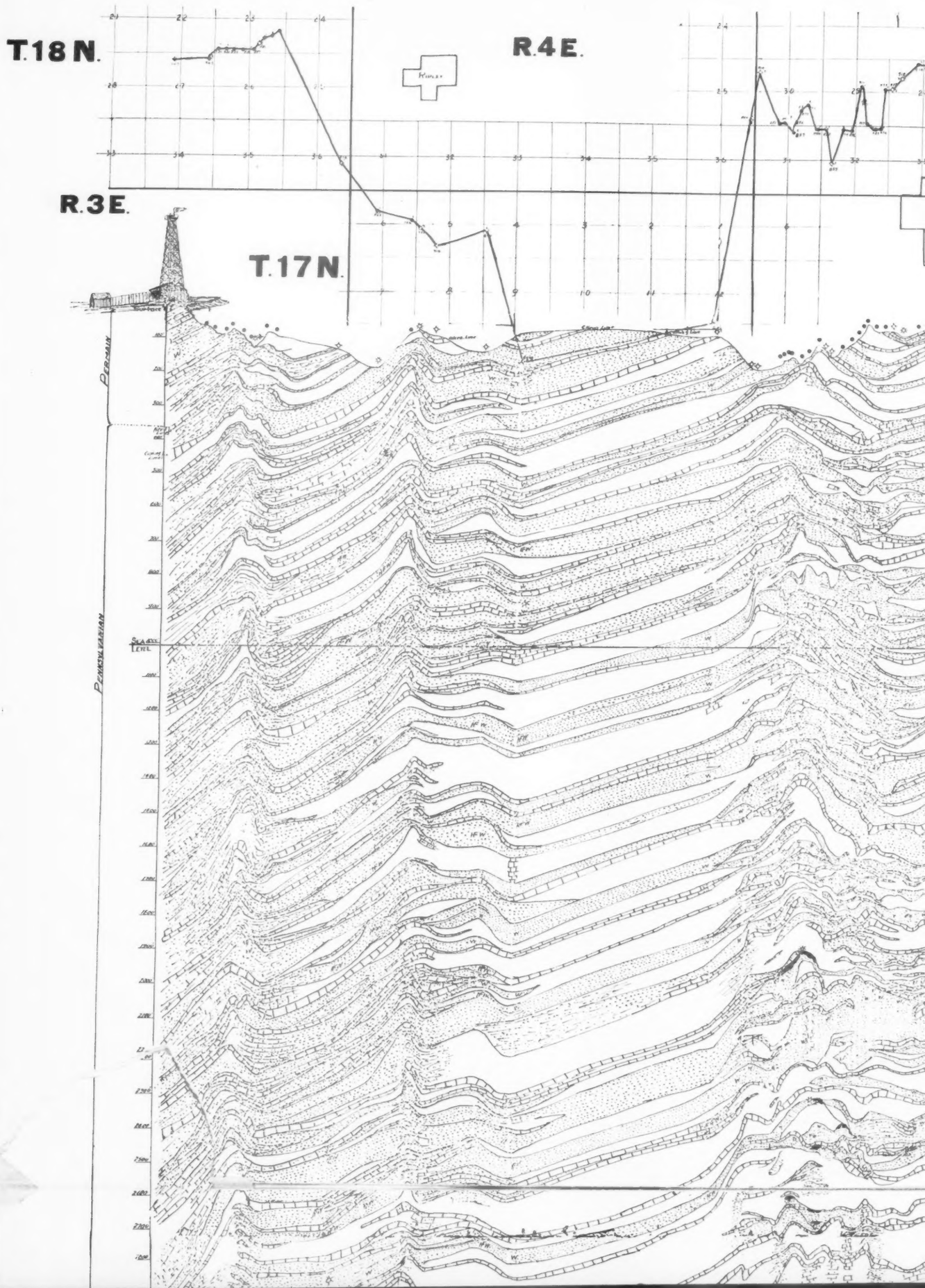
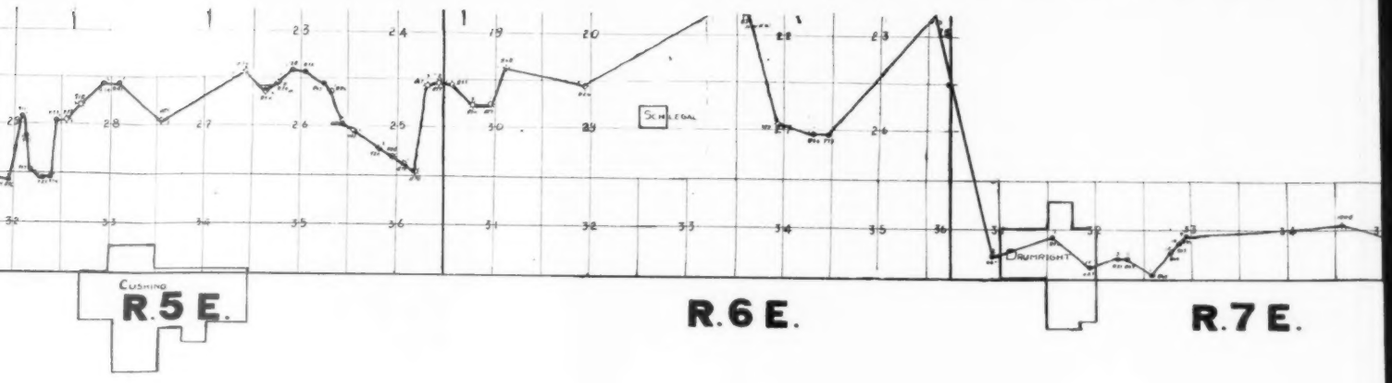
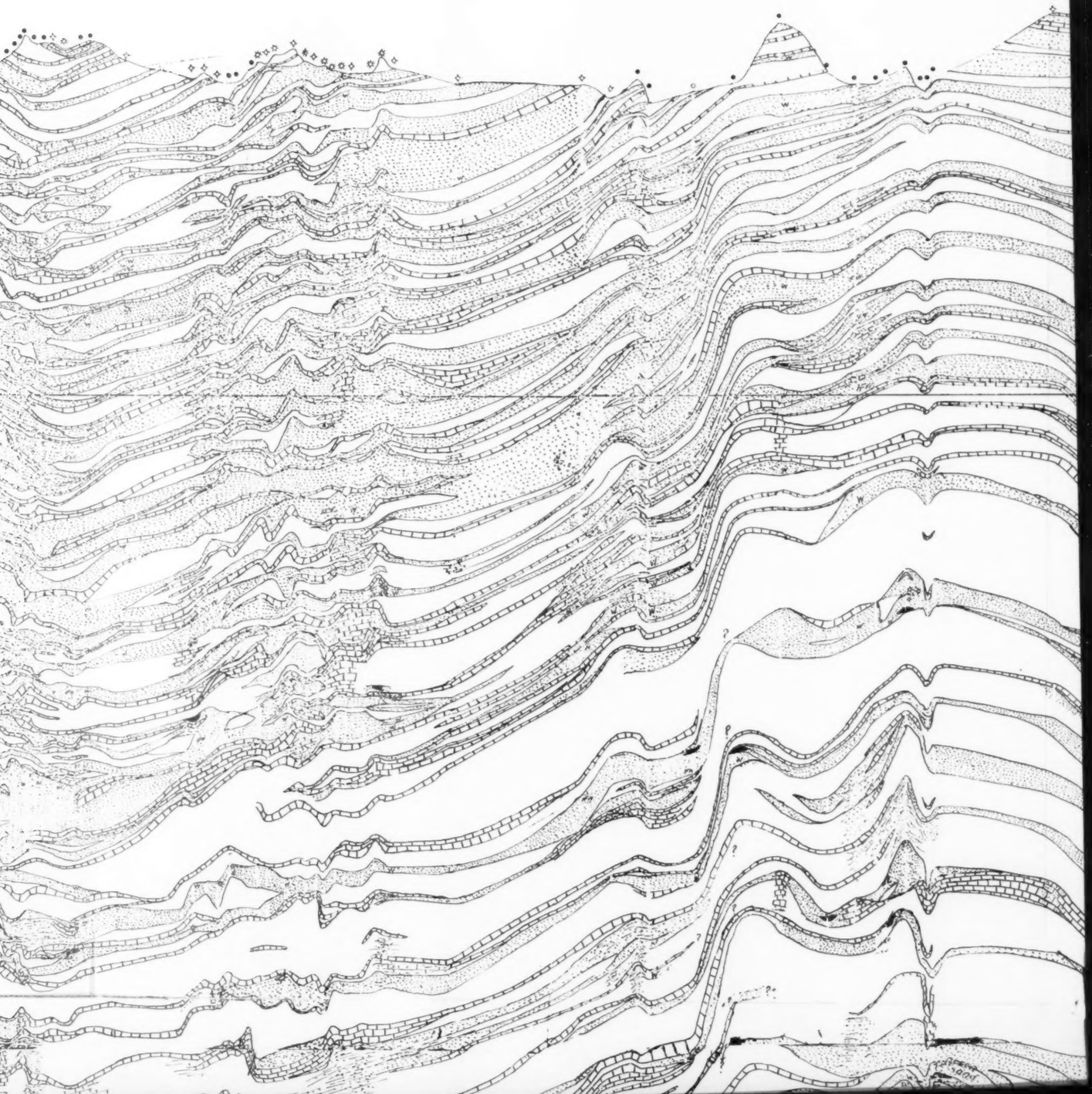


# F FIFTY-FOUR MILES

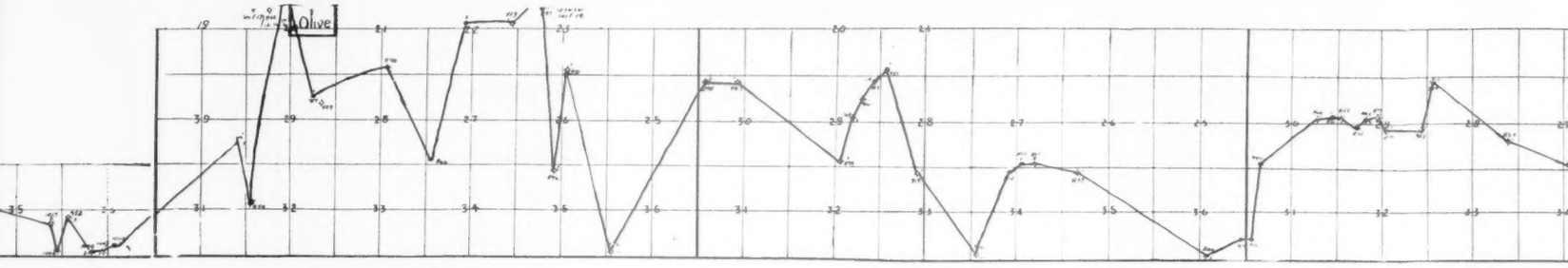
(Published in The Oil and Gas Journal, March 24



# OF OKLAHOMA OIL LAND,

24, 1927, through courtesy of Ralph A. Brant and W. C. Adams, Shaffer Oil & Refining Co.)

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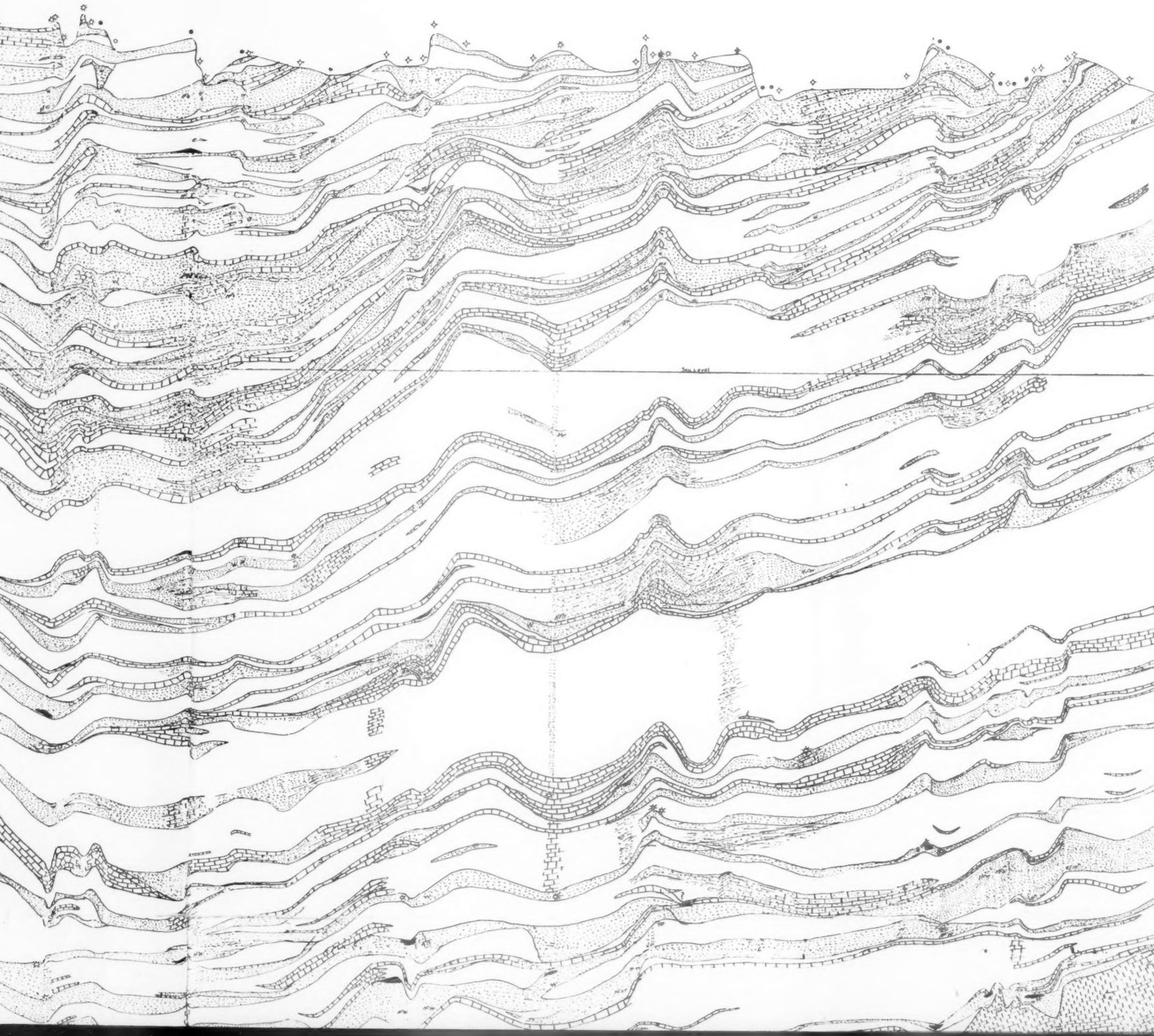
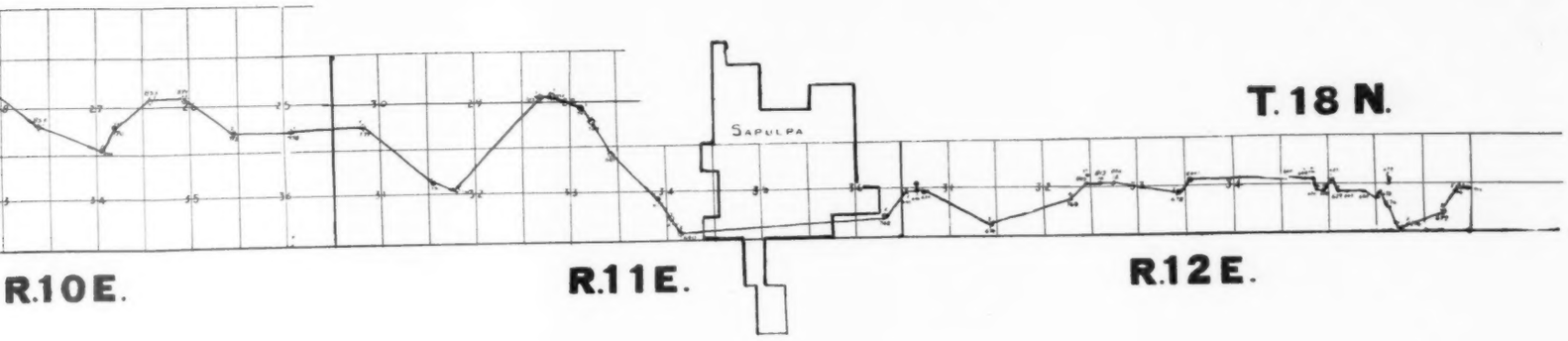
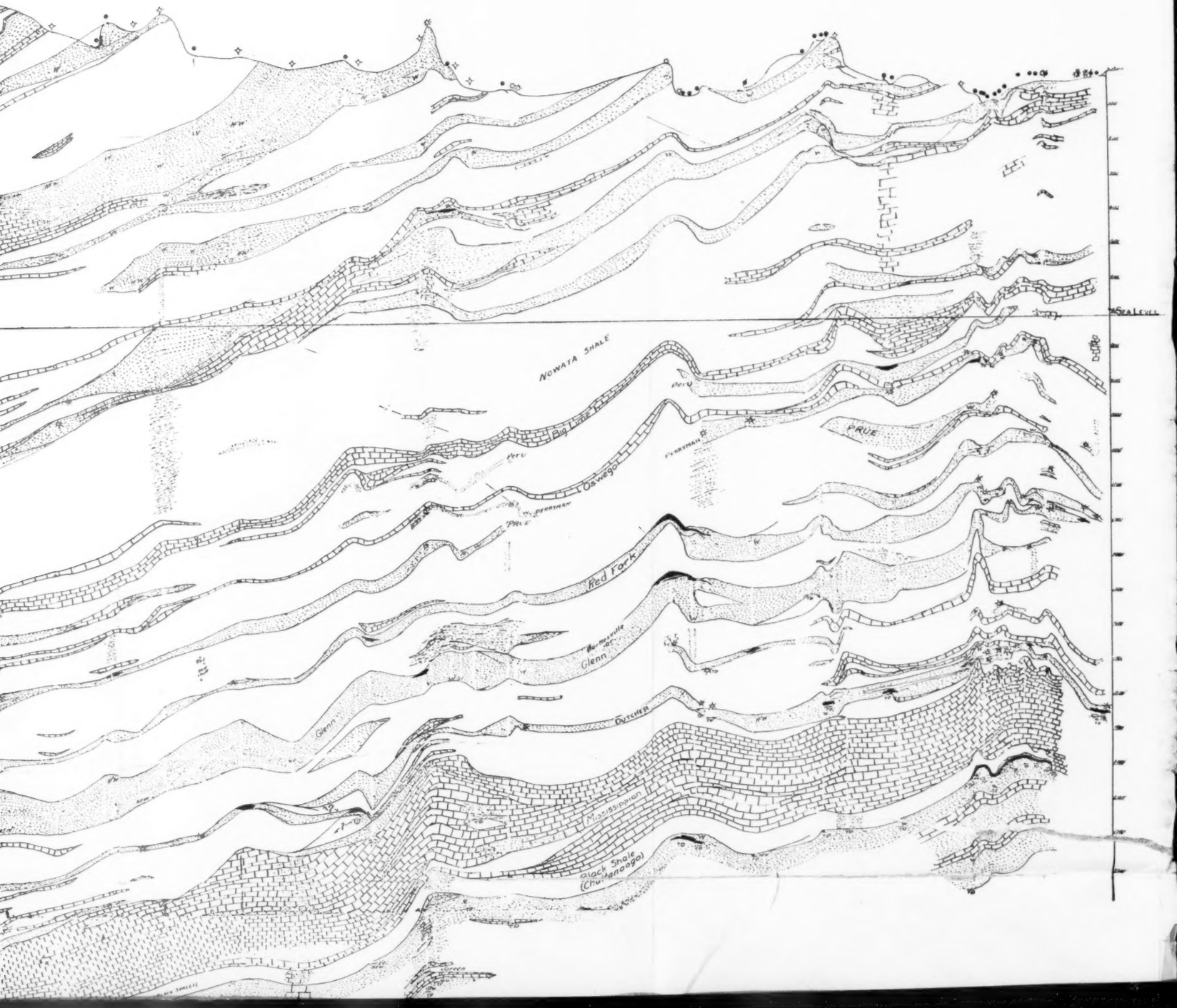


# , SHOWING FORMATIONS



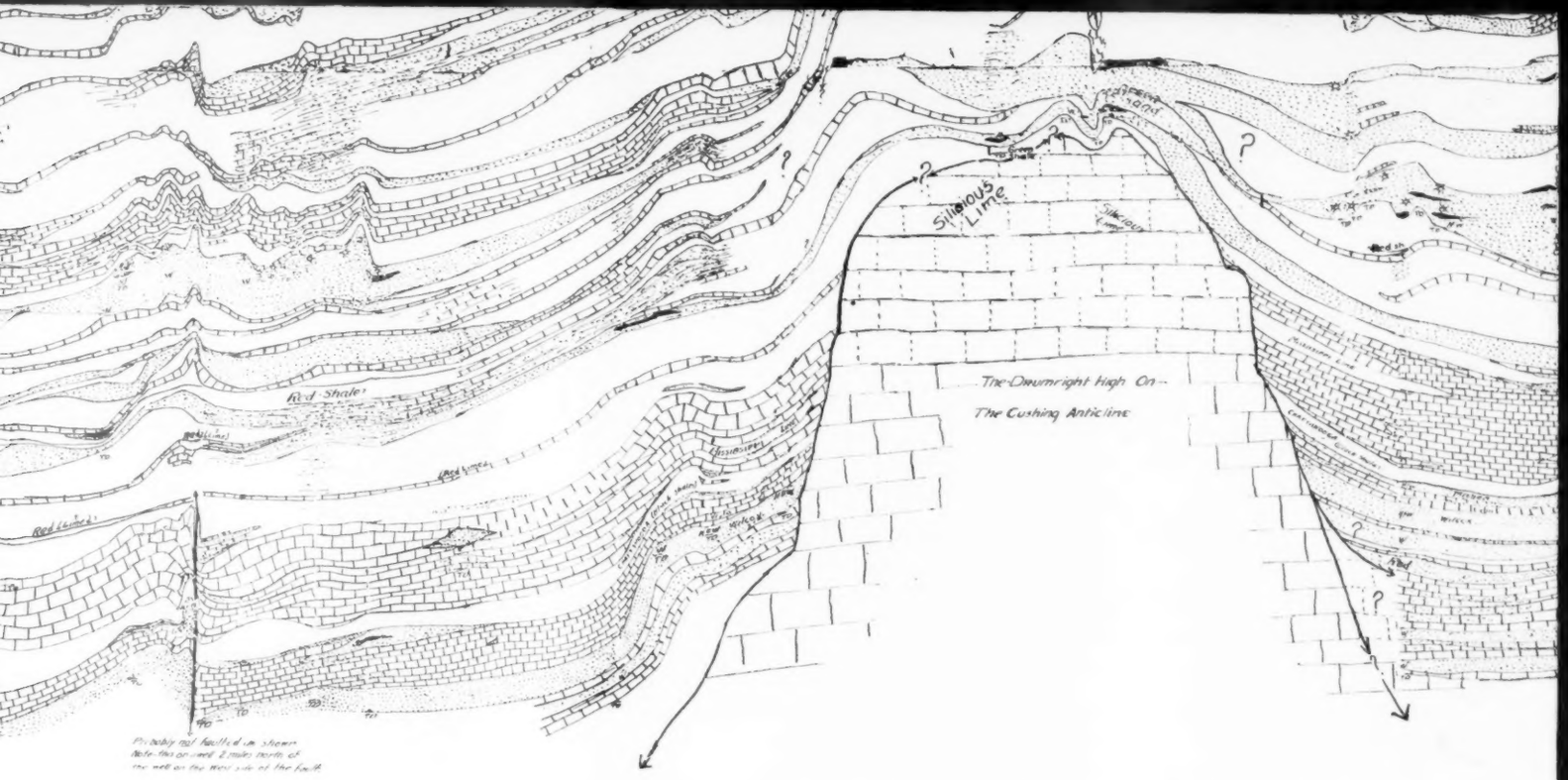
If nature had seen fit to brea
section, and then drop one side o

In this cliff, one would have
cross section portrays such a c
actually in the section; and som
In the 54 miles traversed to the
the mile, and that any one bed

# EASTON'S TYPE LOG LOUISIANA — ARKANSAS

Suite 305 Ardis Bldg. H.D. Easton, E.M. Oil Geologist Shreveport, La

| Geol. Age System Series Group | Formation | Driller's Log | Remarks |
|---|---|---|---|
| CLAIBORNE — Upper | Yegua or Cockfield (Gosport Sand of Ala.) | Sand 100–180; Shale 178–200; Sd. & Bldrs. 200–230; Sd. & Bldrs. 230–270; Sd. & Bldrs. 270–320; Sd. & Bldrs. 320–340 | The Yegua or Cockfield of Louisiana is a non-marine formation consisting of clays, sands and beds of lignite. No fossils except locally a few worn fossil wood fragments, leaf prints and selenite (crystalline gypsum). Thickness, 300' to 600'. The Gosport sand is limited to Alabama where it consists of 30 to 50 feet of highly fossiliferous marine sand (glauconite). Famous fossiliferous sand bed at Claiborne, Ala. The Yegua of Mississippi represents a thinning of the Louisiana beds to the east and probably merges into the Gosport sand in Alabama |
| | (Miss.) Yegua (Texas) Yegua Cook Mtn. — Lisbon Mt. Selman — Tallahatta St. Maurice Mt Lebanon Hinden | Sd. & Bldrs. 340–400; Sd. & Bldrs. 400–500; Shale 500–510; Sand 510–600 | The Lower Claiborne was formerly known as the St. Maurice in Louisiana but now like Ceasar's Gaul, it is divided into three parts: 1. Top member, St. Maurice; Middle, Sparta Sand, and Bottom Cane River fossiliferous. 2. The Sparta Sand (500') consists of very fine silty sand interstratified with lignite: usually brown clay-shale at base. Rich fossils. 3. The Cane River has highly fossiliferous greensand at its top (15'), the middle section consists of very fossil black shale containing fossils veins of green clay, lime rock and sand. The base is a fossil sand (50') and lime rock about 100 feet above the Wilcox; its lower 100 feet consists of a typical marled greensand. The Cook Mountain of Texas is about 400' thick and consists of beds of greensand clay, iron ore, lignite and sand. The greensand is highly fossiliferous and weathers into red loams. The Mount Selman of Texas is about 400' thick and consists of alternate beds of sand, clay, lignite and sandy clay. Beds of commercial iron ore are common. Largely dark, gritty and brown sands, lenses of lignite and clay and thin seams of iron ore. Fossils not plentiful. In Miss. and Ala. the Lower Claiborne is divided into the Lisbon formation at the top and the Tallahatta at the base. The Lisbon is a fossiliferous marine formation (Texas beds named but like Lisbon of Ala.; middle Mosculuba sandstone; red bottom, Winona sand. The unnamed top member (Mosculuba sandstone) of the Louisiana Lower Claiborne is the same as the Lisbon of Alabama. The Mosculuba sandstone, formerly called 'Decatur sand' ledges of saccharoidal to quartzitic sandstone which weathers into characteristic ledges and bluffs. The Winona sand member, 'Enterprise Marl' contains much glauconite which weathers into characteristic a characteristic lithology consisting of brittle gray clay shale and hard laminations. Note. The Tallahatta formation (350–500') overlies the Cockfield and is the top member of the Eocene. It is fossiliferous and carries greensand at its base. The contact between the Tallahatta and the Cockfield is marked by the Cane River and Wilcox as to cause confusion at times. Overlying the Jackson is the Vicksburg (80–150') which is a buff, limey, thinbed at Vicksburg and feathering out both east and west. Its fossils are characteristic and form the pronounced escarpments across Louisiana – these two constituting the Oligocene series. |
| | Sparta Sand | Sd. & Bldrs. 500–510; Shale 510–600; Sd. & Bldrs. 600–700; Shale 700–730; Sd. & Bldrs. 730–810; Shale 810–835; Sand 835–897; Sd. & Bldrs. 897–900 | |
| LOWER | | | |

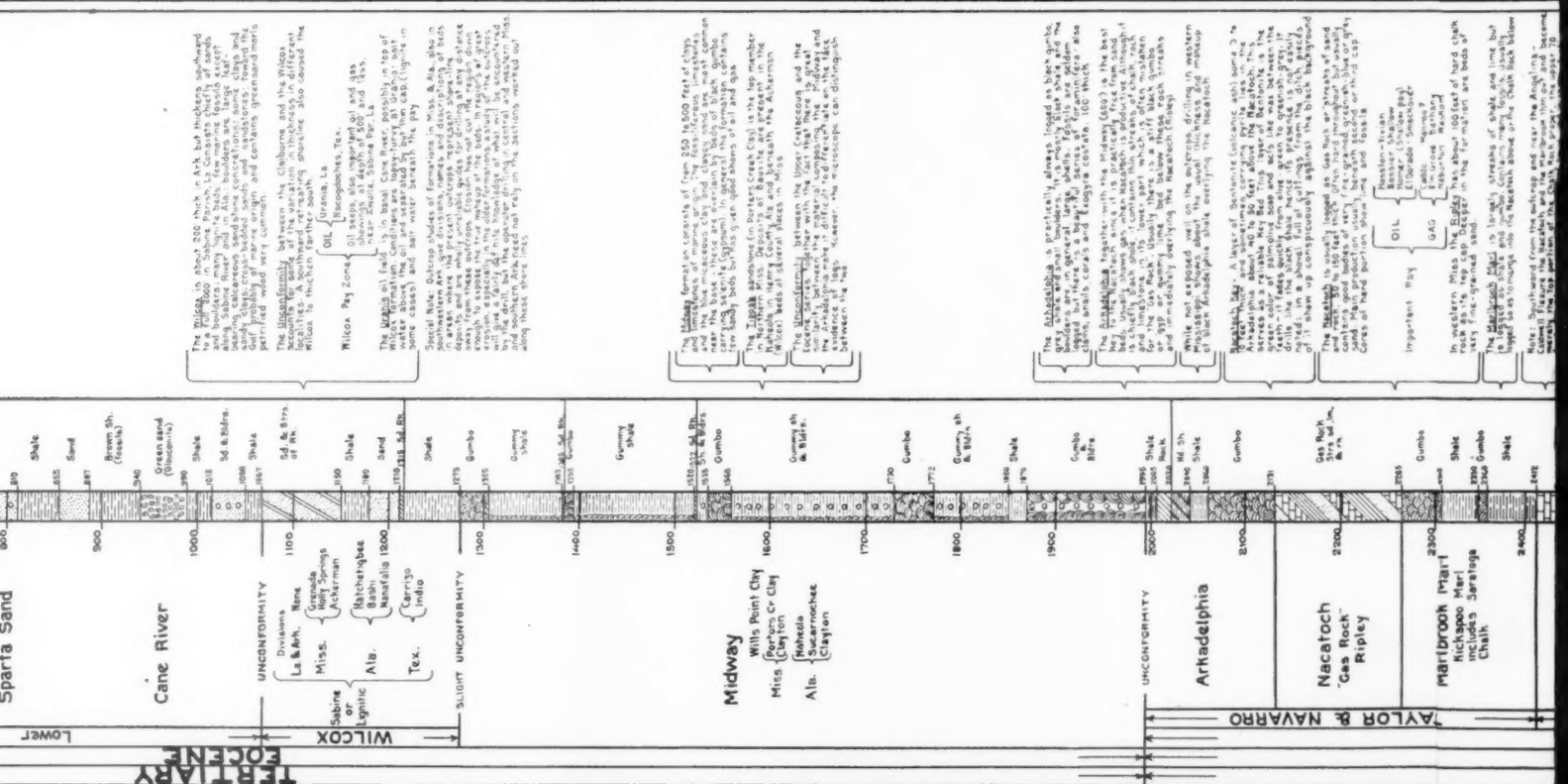


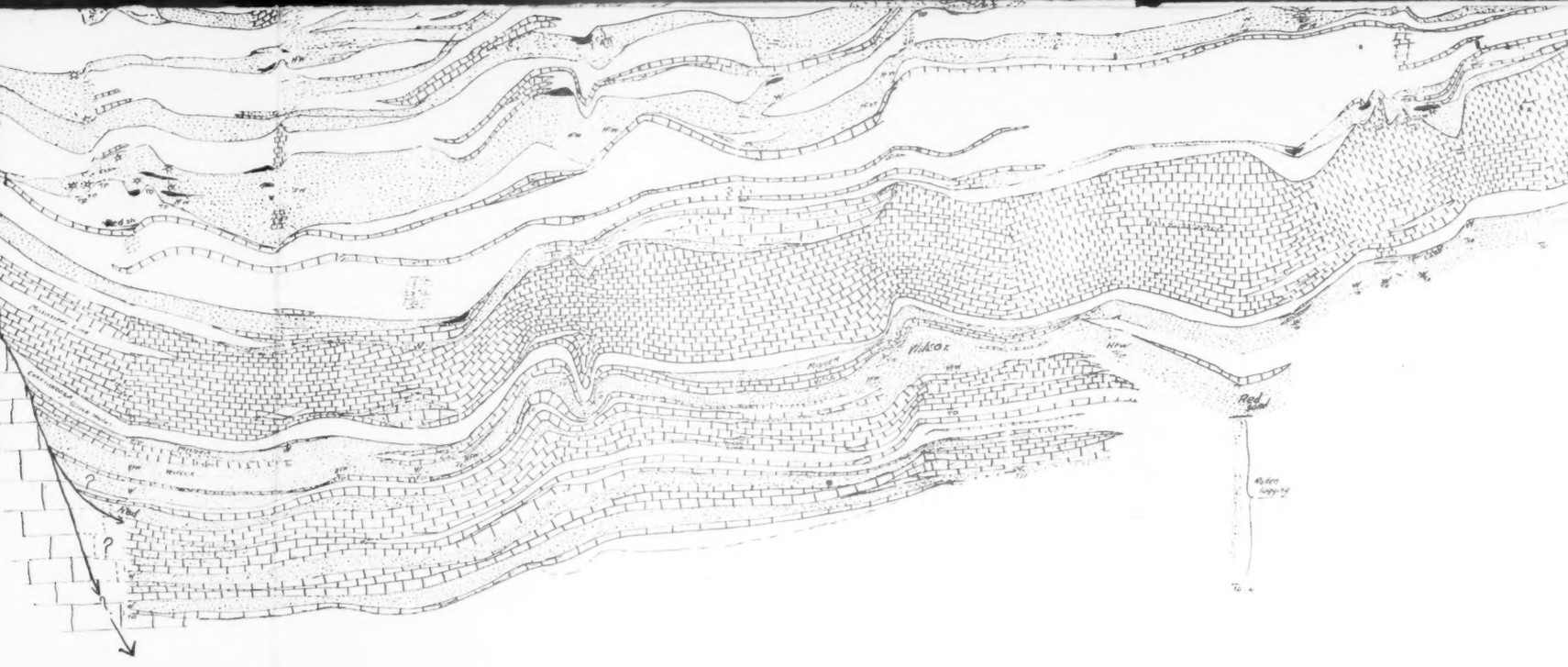

## MANY WELL LOGS USED IN MAKING CORRELATIONS

fit to break the earth along an East-West line as represented by this cross one side or the other 5,000 feet, the result would have been a huge cliff. ould have been able to follow each stratum of rock as it dips to the west. The such a condition developed in the correlation of formations in 175 well logs ; and some 800 others used to tie down the section in all directions. sed to the west, one observes that the rocks dip at approximately 40 feet to one bed followed through, dips some 2,300 feet in the 54 miles.

This cross section is compiled from actual nesses shown probably do not occur. This il relations without assistance from samples. L those shown here.

Scale, vertical, 1 inch—300 feet. Horizon Cross section started August, 1926, comple Correlated and drawn by Ralph A. Brant,





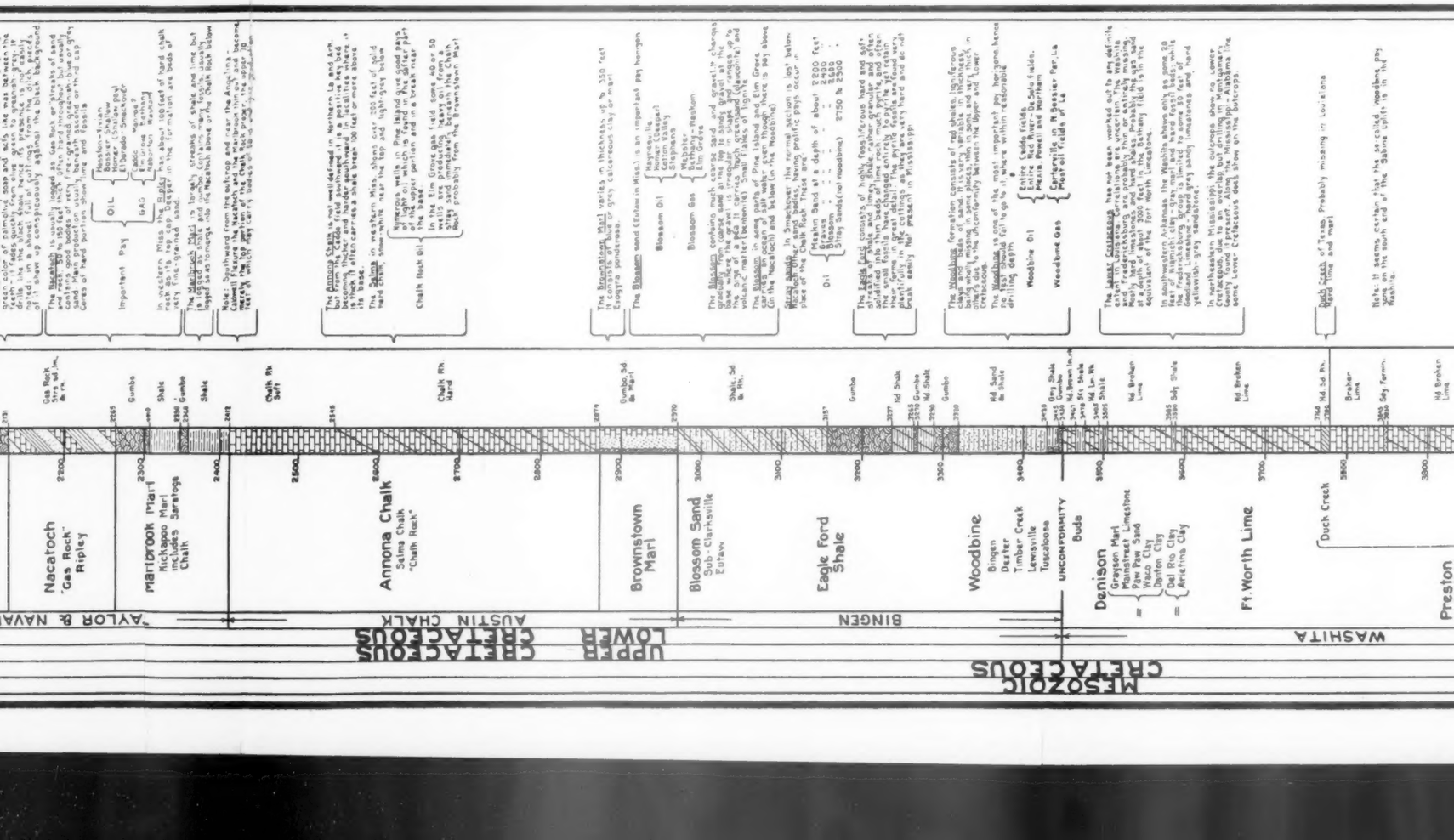
## ELATIONS

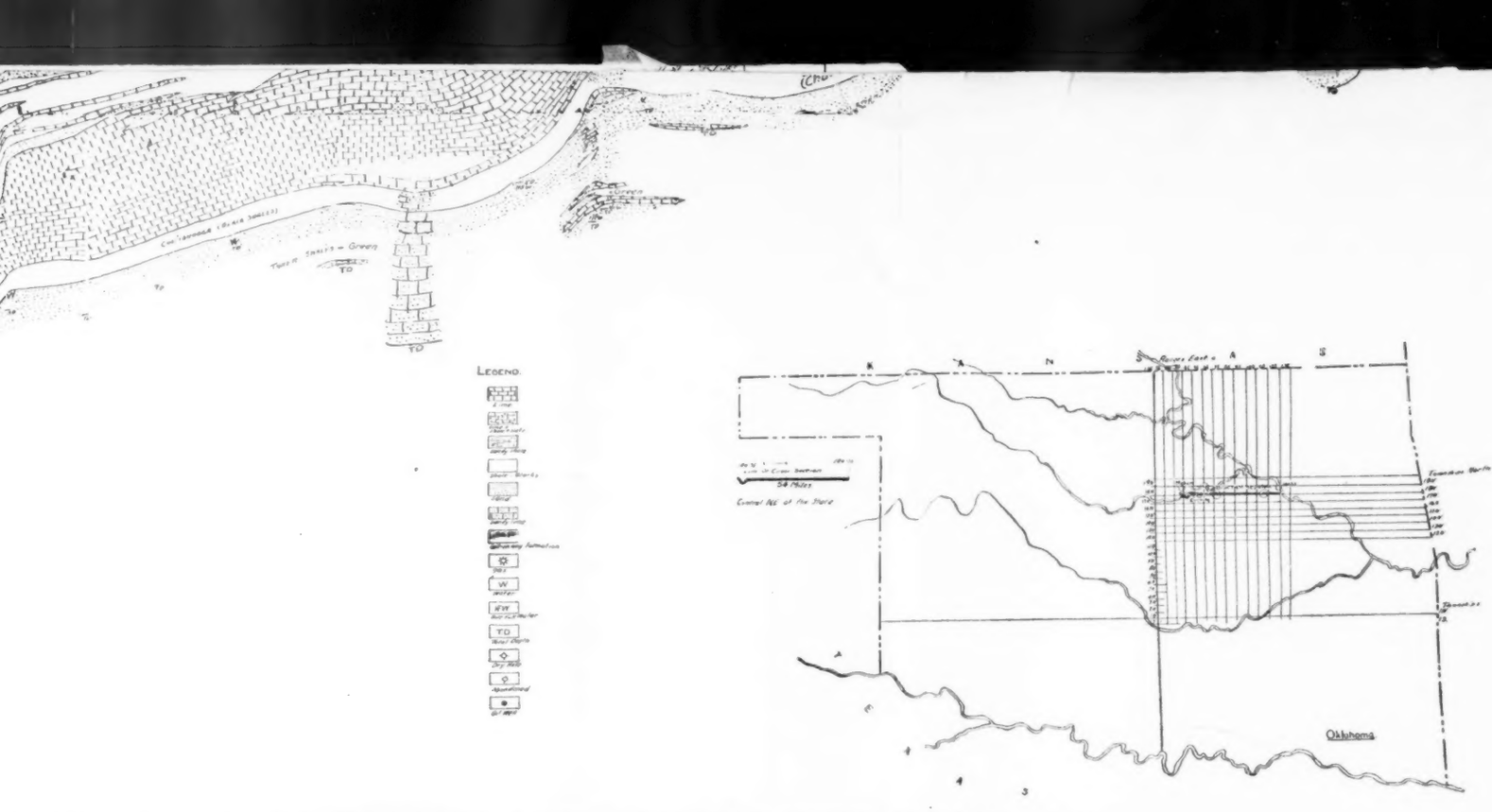
is compiled from actual well logs. The extreme variations in sand thick-
y do not occur. This illustration emphasizes the difficulty of making cor-
tance from samples. Logs based on samples show no such variations as

nch—300 feet. Horizontal, 1 inch—1½ miles.
ed August, 1926, completed February, 1927.
wn by Ralph A. Brant, Shaffer Oil & Refining Co., geological department.

## EXPLANAT

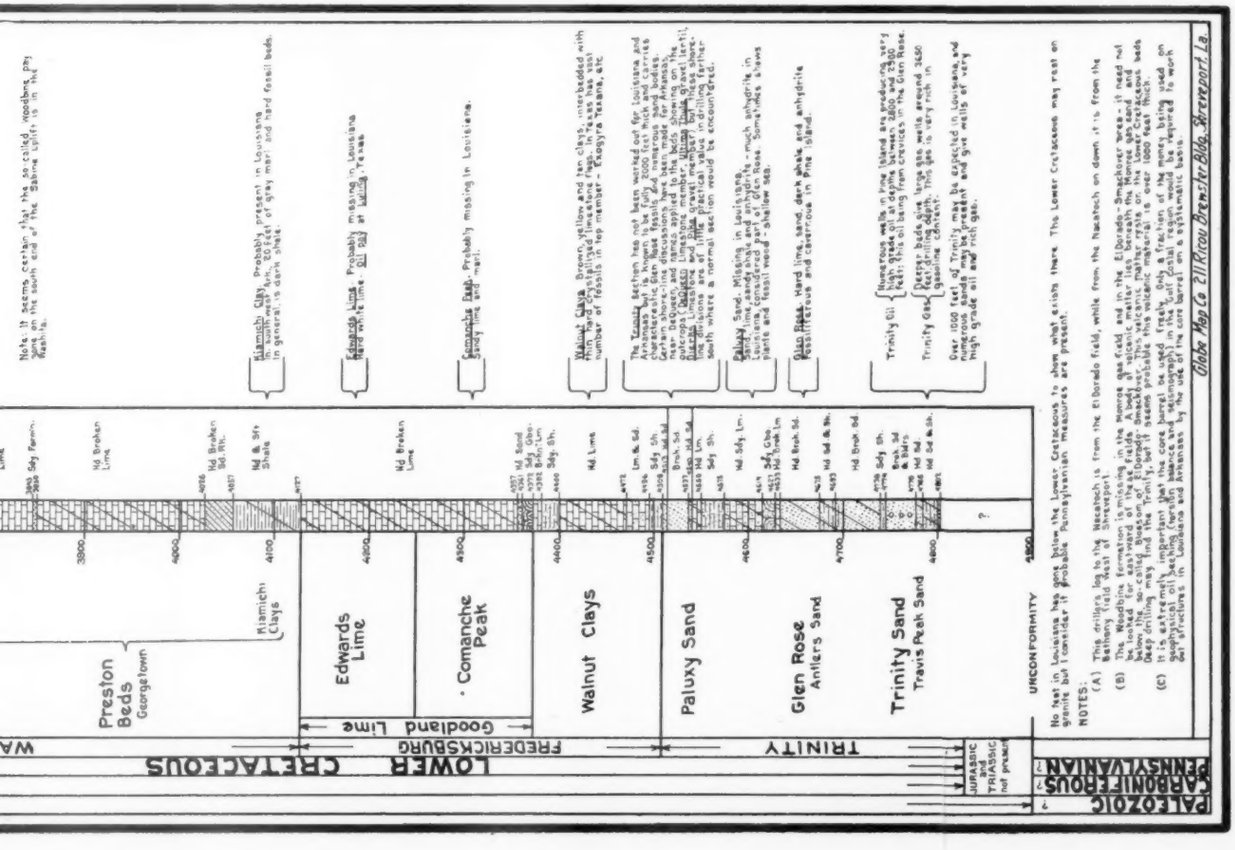
Theoretically in this area, the Siliceous Lime lies at
Sand. Three miles northwest on the high, the Shaffer
Fisher into the Siliceous Lime at the base of the so-cal
cor. NE 7-18-7. This was in May, 1925. Samples were d
William C. Adams, and determined as true Siliceous Lim
had a similar experience near this lease. The Fisher w
green materials in the Tucker. The same condition is t






## PLANATION OF THE DRUMRIGHT HIGH ON THE CUSHING ANTICLINE

he lies at or close to, the base of the Tucker e Shaffer Oil & Refining Co. drilled its No. 25 the so-called Tucker Sand. Location NE es were determined by Walter J. Allen and iceous Lime. Later the Twin State Oil Co. Fisher wells, Nos. 11, 13 and 25, carried dition is true for the wells in this cross sec-tion. Quoting from a letter of R. R. Brandenthaler of the U. S. Bureau of Mines, "The green and mixed samples from Shaffer Oil & Refining Co.'s No. 20 Wilson and No. 11 Wilson in 7-18-7 were determined as Tucker, but they really were re-worked Tyner sediments." Samples from other wells in this section show the same conditions to be true. It is probable that the Siliceous Lime was first uplifted at the close of Mississippian time, arching the Mississippi Lime, Wilcox Sand, etc., into a very high mountain range. Subsequent erosion truncated these beds so that the area was again reduced to sea level by the close of Bartlesville time. The beds are not faulted out as shown in the cross section, but the difference between the horizontal and vertical scales of this map makes it impossible to show them in their proper attitudes.



# The ADVERTISERS' INDEX


A

Acme Fishing Tool Co.
Ajax Iron Works ..... 122-123
Ajax Rope Co. ..... 166
Allegheny Steel Co.
Aluminum Co. of America
Amarillo Hotel ..... 187
American Asphalt Paint Co.
American Cable Co., Inc.
American Car & Foundry Co.
American Mfg. Co. of Texas
American Radiator Co.
American Roller Bearing Co. ..... 132
American Rolling Mill Co.
American Schaeffer and Budenberg Corp.
American Sheet & Tin Plate Co.
American Spiral Pipe Works
American Telephone & Telegraph Co.
American Well Works
Anderson Engine & Foundry Co.
Andrews Steel Co. ..... 160
Arco Company, The ..... 26
Armstrong Bros. Tool Co. ..... 162
Askania, Werke, A. G.
Association of Natural Gasoline Mfgrs. 18
Athey Truss Wheel Co. ..... 30
Auer, C. A.
Austin Co. ..... 161
Axelson Machine Co. ..... 23

B

B. & A. Specialty Co.
Baash-Ross Tool Co. ..... 135
Babcock & Wilcox Tube Co., The
Baker Casing Shoe Co. ..... 167
Baldwin Chain & Mfg. Co.
Barber Asphalt Company
Barber-Greene Co.
Barnickel, Wm. S., & Co. ..... 164
Barnsdall Refineries, Inc. ..... 9
Bartlesville Supply Co. ..... 121
Beaumont Iron Works Co.
Becker Specialty Co.
Belle City Mfg. Co. ..... 126
Bessemer Gas Engine Co. ..... 2
Biggs Boiler Works Co.
Bignall & Keeler Machine Works ..... 6
Blackmer Pump Co.
Blaw-Knox Co.
Borden Co. ..... 131
Bovaird & Seyfang Mfg. Co.
Bovaird Supply Co., The ..... 20
Braden Steel & Winch Co.
Brady Conveyors Corp.
Braun, C. F., & Co.
Bridgeport Machine Co. ..... Front Cover
Bristol Co.
Broderick & Bascom Rope Co. ..... 29
Brokaw, Dixon, Garner & McKee ..... 166
Brooks Engineering Corp. ..... 12
Brown, Arthur C. ..... 166
Brown Instrument Co. ..... 13
Brownell Co. ..... 166
Buckeye Traction Ditcher Co.
Buda Co.
Buffalo Gasolene Motor Co.
Bullock, Henry E.
Burns Tool Co.
Burt Corporation ..... 112-113
Burt Mfg. Co. ..... 135
Butler Mfg. Co.
Byers, A. M., Co.
Byron Jackson Pump & Mfg. Co., Inc.

C

Cameron Iron Works
Campbell, J. A. ..... 127
Canadian Pacific Railway Co.
Carbondale Machine Co.
Celite Products Co.
Central Alloy Steel Corp.
Central Forging Co.
Central Tube Co. ..... 164
Chain Belt Co.
Champion Machine & Forging Co.
Chaplin-Fulton Mfg. Co. ..... 162
Chapman Valve Mfg. Co.
Chestnut & Smith Corp.
Chicago Bridge & Iron Works
Chicago Pneumatic Tool Co. ..... 58
Chisholm-Moore Mfg. Co. ..... 163
Clark Bros. Co. ..... 116-117
Classified Wants ..... 136-137
Cleveland Tractor Co.
Cleveland Trencher Co., The
Climax Engineering Co.
Columbian Rope Co.
Columbian Steel Tank Co. ..... 159
Columbus Forge & Iron Co.
Continental Motors Corp.
Continental Supply Co. ..... 69
Cook Motor Co., The
Cooper, C. & G., Co. ..... 101
Cox & Sons Co., The
Crane Co.
Crane Packing Co.
Crescent Belt Fastener Co.
Crown Central Petroleum Corp.

D

D. & B. Pump & Supply Co.
Darling Valve & Mfg. Co.
Dart, E. M., Mfg. Co.
Davis, G. M., Regulator Co.
Dayton Pipe Coupling Co.
Dearborn Chemical Co. ..... 82
De La Vergne Machine Co.
Delta Electric Co.
Detex Watchclock Corp.

D

Detroit Graphite Co.
Diamond Drill Carbon Co. ..... 162
Dixon, Joseph, Crucible Co.
Dodge Mfg. Co.
Donovan Boiler Works, Inc.
Dresser, S. R., Mfg. Co. ..... 45
Dunn Mfg. Co. ..... 49
DuPont de Nemours & Co., Inc., E. I.
Duriron Company, The

E

Eagle-Picher Lead Co. ..... 3
Eastern Torpedo Co.
Eclipse Paint & Mfg. Co.
Edward Valve & Mfg. Co.
Elliott Core Drilling Co. ..... 168
Empire Refineries, Inc.
Emsco Derrick & Equipment Co.
Exchange National Bank

F

Fairbanks-Morse & Co.
Federal Supply Co.
Fenwick-Reddaway Mfg. Co. ..... 160
Fisher Governor Co. ..... 11
Foamite-Childs Corp. ..... 8
Fohs, F. Julius
Foos Gas Engine Co. ..... 134
Ford Chain Block Co. ..... 130
Foxboro Co., Inc., The
Franklin Valveless Engine Co. ..... 80-81
Frick-Reid Supply Co. ..... 62

G

Gallagher Co.
Gardner Governor Co. ..... 25
Garlock Packing Co. ..... 107
Gasoline Recovery Corp.
Gaso Pump & Burner Mfg. Co. ..... Inside Back Cover
General American Tank Car Corp.
General Electric Co. ..... 60
General Insulating & Mfg. Co.
General Motors Truck Co.
Gilbert & Barker Mfg. Co. ..... 135
Gilfillan Machine Works
Goodrich, B. F., Rubber Co.
Goodyear Tire & Rubber Co.
Gott, H. P., Mfg. Co. ..... 164
Goulds Pumps, Inc.
Graham Brothers
Graver Corp. ..... 27
Gray Processes Corp.
Greenspon's, Joseph, Sons, Iron & Steel Co. ..... 162
Griscom-Russell Co. ..... 102
Guiberson Corp. ..... 57
Gulf Refining Co. ..... 28

H

Halliburton, Erle P., Co.
Halliburton Oil Well Cementing Co.
Harrisburg Pipe & Pipe Bending Co.
Haynes Stellite Co.
Hazard Mfg. Co.
Heppenstall Forge & Knife Co.
Hercules Motors Corp.
Hercules Tool Co.
Heydrick Mapping Co. ..... 166
Hill & Foster Co. ..... 100
Hill, Hubbell & Co.
Hills-McCanna Co.
Hinderliter Tool Co.
Homestead Valve Mfg. Co.
Hope Engineering & Supply Co. ..... 165
Hopkins, Edwin B. ..... 166
Hough, Charles N., Mfg. Co.
Hoyt Metal Co.
Hughes Tool Co. ..... Back Cover
Humble Oil & Refining Co.
Hunt, Robert W., Co.

I

Imperial Belting Co. ..... 132
Imperial Royalties Co.
Indiana Truck Corp.
Ingersoll-Rand Co.
International Derrick & Equip. Co. ..... 32
International Harvester Co. of America
International Nickel Co. ..... 7
International Supply Co. ..... 125
Iron King Mfg. Co.

J

Jarecki Mfg. Co. ..... 5
Jefferson Union Co.
Jensen Bros. Mfg. Co.
Johns-Manville Corp. ..... 72-73
Jones, S. M., Co.

K

Kansas City Hay Press Co. ..... 133
Kaw Steel Construction Co.
Kellogg, M. W., Co. ..... 165
Kelly, John Eoghan ..... 166
Kelly-Springfield Tire Co.
Kennedy Valve Mfg. Co.
Kerotest Mfg. Co.
Keuffel & Esser Co.
Kewanee Boiler Co.
Key Boiler Equipment Co.
Kinley, M. M., Co.

L

Landis Machine Co.
Larkin & Co. ..... 124
Layne & Bowler Co. ..... 19
Leader Iron Works
Leidecker Tool Co.
Leschen, A., & Sons, Rope Co.
Lientz, B. P., & Co.
Lincoln Electric Co.
Linde Air Products Co. ..... 1
Link-Belt Co.
Longyear, E. J., & Co. ..... 89
Lubrikup Company
Lucas, John & Co., Inc. ..... 156
Lucey Mfg. Corp.
Ludlow Valve Mfg. Co. ..... 103
Lufkin Fdy. & Machine Co.
Lufkin Rule Co.
Lunkenheimer Co.

Mc

McCord Radiator & Mfg. Co. ..... 84
McGregor Working Barrel Co. ..... 164
McIntosh & Seymour Corp.
McJunkin Supply Co.
McKee, Arthur G., & Co.

M

Magnolia Petroleum Co.
Maloney Tank Mfg. Co. ..... 154
Manzel Bros. Co.
Marion Machine Foundry & Supply Co.
Marsh Gauge Pole Co. ..... 166
Master Builders Co.
Mathieson Alkali Works, Inc.
Maverick, Phillip ..... 166
Merco Nordstrom Valve Co.
Merit Oil Equipment Co. ..... 167
Metric Metal Works
Midwest Piping & Supply Co.
Miller Improved Gas Engine Co.
Miller, Max B., & Co., Inc.
Mine Safety Appliance Co.
Moon Mfg. Co.
Moore, Lee C., & Co., Inc. ..... 79-108-109
Munn & Co. ..... 166
Murray Tool & Supply Co.
Myers, F. E., & Bro., Co. ..... 187

N

National Carbon Co., Inc. ..... 1
National Lead Co. ..... 95
National Petroleum Engineering Co. ..... 187
National Supply Co. ..... 93-96-97
National Transit Pump & Machine Co. ..... 55
National Tube Co.
National Turnbuckle Derrick Co.
Neilan Schumacher & Co. ..... 168
Newton Process Mfg. Co. ..... 43
Norris Bros., Inc. ..... 111
Norris, W. C.
North American Car Corp.
Northern Fire Apparatus Co. ..... 14
Northern Oil Information Bureau ..... 166
Northrup Equipment Co.
Nuttall, R. D., & Co.
Nye Tool & Machine Works

O

Oakite Products, Inc. ..... 98
O Brien Steel Construction Co.
Oertling, L., Ltd.
Ohio Steel Foundry Co.
Oil City Iron Works
Oil Conservation Engineering Co.
Oil Country Specialties Mfg. Co.
Oil Insurance Association
Oil Well Accessories Co.
Oil Well Supply Co. ..... 75
Oxweld Acetylene Co. ..... 1

P

Page Steel & Wire Co. ..... 115
Paige & Jones Chemical Co., Inc.
Parkersburg Machine Co.
Parkersburg Rig & Reel Co. ..... 83
Patrick, R. S. ..... 130
Pattin Bros. Co.
Pelican Well Tool & Supply Co. ..... 10
Penberthy Injector Co. ..... 129
Petroleum Appliance Co.
Petroleum Iron Works Co.
Pforzheimer, Carl H., & Co. ..... 129
Phillips Petroleum Co.
Pittsburg Boiler & Machine Co.
Pittsburgh-Des Moines Steel Co.
Pittsburgh Equitable Meter Co. ..... 71
Pittsburgh Steel Products Co.
Pilbrico Jointless Firebrick Co.
Plymouth Cordage Co.
Porter & Co.
Powell, William, Co.
Power Mfg. Co. ..... 164
Power Piping Co. ..... 94
Power Plant Equipment Co.
Power Specialty Co. ..... 16
Prescott Co., The
Prest-O-Lite Co., Inc., The ..... 1
Pure Oil Co. ..... 31
Pyle-National Co.

Q

Quaker City Rubber Co. ..... 187

R

Ratigan, J. P., Co.
Reading Iron Co. ..... 4
Reading Steel Castings Co., Inc.
Reed Roller Bit Co. ..... Inside Front Cover
Regan Forge & Engineering Co. ..... 22
Reid, Joseph, Gas Engine Co. ..... 105
Republic Iron & Steel Co.
Republic Supply Co. ..... 106
Ridge Tool Co.
Riehle Bros., Testing Machine Co.
Riter-Conley Co. ..... 187
Robinson, A.
Rock Island Plow Co.
Roots, P. H. & F. M., Co.
Ross-Meehan Foundries
Ryerson, Joseph T., & Son, Inc. ..... 166

S

Safety Pulling Machine Co.
Schutte & Koerting Co.
Shaffer, J. E., Co.
Shaffer Tool Works
Shaw, S. F. ..... 164
Sheffield Steel Corp.
Shippers' Car Line Corp.
Sinclair Refining Co. ..... 149
Sivyer Steel Casting Co.
Skelly Oil Co.
Skinner, M. B., Co. ..... 187
Smith, A. O., Corp.
Smith Separator Co. ..... 11
Somner, P. J., Gas Burner Co.
South Chester Tube Co.
Southern Cornice Works
Southwestern Engineering Corp.
Spang & Co.
Spang, Chalfant & Co., Inc. ..... 65
Spence Machine Co.
Spencer Trailer Co.
Stanley Belting Corp.
Star Drilling Machine Co.
States Engineering Co., The
Stearns-Roger Mfg. Co. ..... 15
Steiner, George ..... 164
Strom Steel Ball Co. ..... 118
Sullivan Co., The
Sullivan Machinery Co. ..... 134
Symonds & Henson Rig Co. ..... 21

T

Taubman Supply Corp.
Taylor Instrument Companies
Templeton, Kenley & Co., Ltd.
Texas Company, The ..... 24
Texas Pacific Railway Co. ..... 133
Thomas, C. R. ..... 166
Timken Roller Bearing Co. ..... 66-67
Tips Engine Works
Titusville Forge Co. ..... 104
Titusville Iron Works
Toledo Pipe Threading Machine Co. ..... 91
Trimont Mfg. Co.
Trumble Gas Trap Co. ..... 131
Turk & Mauldin ..... 166
Tulsa Sheet Metal Co.
Twin Disc Clutch Co.

U

United Iron Works, Inc. ..... 119
United States Cast Iron Pipe & Fdy. Co.
United States Rubber Co. ..... 90
United States Industrial Diamond Corp. 162
Universal Oil Products Co. ..... 51
U. S. Tool Co.

V

Victaulic Co. of America ..... 128
Victor Balata & Textile Belting Co. ..... 128
Vogt, Henry, Machine Co.
Volz Engineering Equipment Co.

W

Wagner Electric Corp.
Wailes Dove-Hermiston Corp. ..... 187
Wall Rope Works, Inc.
Walsh & Weidner Boiler Co. ..... 163
Walworth Co. ..... 53
Warren Petroleum Co.
Waukesha Motor Co.
Westcott & Greis ..... 120
Western Iron & Foundry Co. ..... 99
Western Machinery Co.
Western Supply Co.
Westinghouse Electric & Mfg. Co. ..... 155
Wheeler Condenser & Engineering Co.
Wheeling Steel Corp.
Wickwire Spencer Steel Co.
Wico Electric Co.
Widdell Engineering Co.
Williams, J. H., & Co.
Williamsport Wire Rope Co. ..... 110
Williams Tool Corp.
Wilson Oil Tools Corp.
W-K-M Company, Inc. ..... 77
Worthington Pump & Machinery Corp.
Wright Mfg. Co.

Y

Yale & Towne Mfg. Co. ..... 17

Z

Zero Hour Torpedo Co.

# The Oil and Gas Journal

PRODUCING REFINING MARKETING

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# TABLE OF CONTENTS

## SPECIAL ARTICLES


54-Mile Cross-Section of Oklahoma—Map Insert Between Pages ..... 32 and 33

New Oil Pool Opened in East Texas ..... 35
*By Andrew M. Rowley*
As operators discuss overproduction and output continues to exceed demand, another field is discovered.

Operation of Air Lift at Seminole ..... 37
*By J. L. Dwyer*
Most important feature in oil production today. Millions in equipment.

Restraint on Seminole Unlikely ..... 37
*By J. L. Dwyer*
State Corporation Commission may ask relief for small producers. Umpire Collins testifies.

Geologists expect record convention ..... 38-39
*By Andrew M. Rowley*
Papers scheduled cover latest developments in various fields. Research and greater recovery to be discussed.

England Encourages Use of Gasoline ..... 40
*By Charles E. Kern*
Notwithstanding need for revenue it abandoned tax on motor spirit.

Empire Co. Announces Rival Gas Line ..... 40

Burbank Field Not Yet Defined (Map of Osage Sale) 41
*By James McIntyre*
Close-in acreage that looks promising will be offered at Osage sale.

Potash May Make Dry Hole Profitable ..... 42
*By V. H. McNutt*
Oil producers and oil geologists interested in possibilities indicated in southwest.

Taxed to a Standstill (Editorial) ..... 44

Death of President Charles K. Clark ..... 46

Humble Co. Opens New Pool in East Texas ..... 47
*By Special Correspondent*


## FIELD OPERATIONS


North and West Texas ..... 46-47-82
*By C. D. Lockwood*

Late Fields ..... 47

Texas Panhandle ..... 48-82
*By C. D. Lockwood*

Oklahoma ..... 50
*By J. L. Dwyer*

Mexico ..... 50
*By George Blaidone*

Farmington, New Mexico ..... 52
*By Special Correspondent*

Kansas ..... 52
*By J. L. Dwyer*

Gulf Coast ..... 54
*By P. L. McGreal*

Southwest Texas ..... 56
*By B. D. Stevenson*

North Louisiana-Arkansas ..... 59
*By James H. Dameron*

Artesia, New Mexico ..... 59
*By Special Correspondent*

East Central Texas ..... 61
*By Special Correspondent*

Rocky Mountain Area ..... 63
*By Frank B. Taylor*

Canada ..... 63
*By Victor Lauriston*

California ..... 64
*By L. P. Stockman*

Pennsylvania-West Virginia ..... 68
*By D. S. Wakenight*

Michigan ..... 68
*By Whit*

Central West ..... 70
*By Whit*

Kentucky-Tennessee ..... 70
*By Whit*


## ARTICLES OF GENERAL INTEREST


The Advertisers' Index ..... 33

Men Known in Oildom and Personals ..... 74

Natural Gas Developments ..... 76

Equipment and Supplies ..... 78

Extended Delivery of Large Pipe ..... 78
*By B. E. V. Luty*

Classified Want Advertisements ..... 136-137

Detailed Operations in All Fields, February ..... 169

Crude Petroleum Statistics ..... 188

Oil Securities Heavy but Not Active ..... 145
*By N. O. Fanning*


## REFINING AND MARKETING


Fuels and Kerosene Prices Lower ..... 36
*By C. O. Willson*
All grades reduced in Oklahoma. Gasolines fairly firm first of week after record slump.

Better Tone in Chicago Spot Market ..... 138
*By J. B. Waldo*

Eastern Refined Market Weak ..... 139
*By N. O. Fanning*

Unique Features at Macmillan Plant ..... 140
*By Neil Williams*
Compact installation operating with Panhandle crude presents new type refinery.

Refining and Marketing News ..... 142

Technical Questions Answered ..... 143
*By Dr. C. K. Francis*

Plant Operators' Page ..... 144

Refinery and Crude Prices ..... 146-147

Tank Wagon Quotations ..... 148

Detonation in Petroleum Motor Fuels ..... 157
*By Samuel P. Marley, Donald R. Stevens and W. A. Gruse*
Not all cracked gasolines satisfactory antiknock motor fuels.



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Refinery Section Starts on Page 138

# New Oil Pool Opened in East Texas

Highest daily average estimated production in 1926, week ended Dec. 25, 2,385,139 bbls. Lowest in 1926, January 30, 1,915,960 bbls.

## As Operators Discuss Overproduction and Output Continues to Exceed Demand, Another Field Is Discovered

By Andrew M. Rowley

Highest daily average estimated light oil production in 1926, week ended Dec. 25, 1,797,349 bbls. Lowest in 1926, Jan. 30, 1,371,600 bbls.

While Oklahoma operators were conferring in Oklahoma City with members of the State Corporation Commission relative to the overproduction situation in Oklahoma and refiners in some sections were announcing the shutting down of some cracking plants in an effort to curtail to an extent at least the production of gasoline, a new oil pool was opened in East Texas. The Humble Oil Refining Company completed on Monday of this week a well in Cherokee County, Texas, about 14 miles west of Jacksonville and in wildcat territory, far removed from other production, which started flowing at the rate of 55 barrels hourly and which on Tuesday of this week was making 70 barrels an hour of 40.1 gravity crude. The Humble controls about 14,000 acres around the well so development of the field, said to be a salt dome, is entirely within the hands of that company.

The Earlsboro section of the Seminole area seems to be defined on the west and the only part of that field which now appears very promising is to the south. The South Seminole Pool, as the 8-6 territory is called, will have a big influence on the production situation when wells now drilling there begin to come in in greater numbers.

There is little expectation upon the part of the industry that any curtailment program will be inaugurated in the Seminole Field except such as is forced by lack of pipe line or storage facilities to handle the crude. Consequently, there is little indication of any material change in the production situation for some time to come. Producers of Seminole crude likely will find a ready market for whatever they produce as it is understood eastern refiners intend to run this crude through refineries as quickly as it can be procured, because of its high gravity.

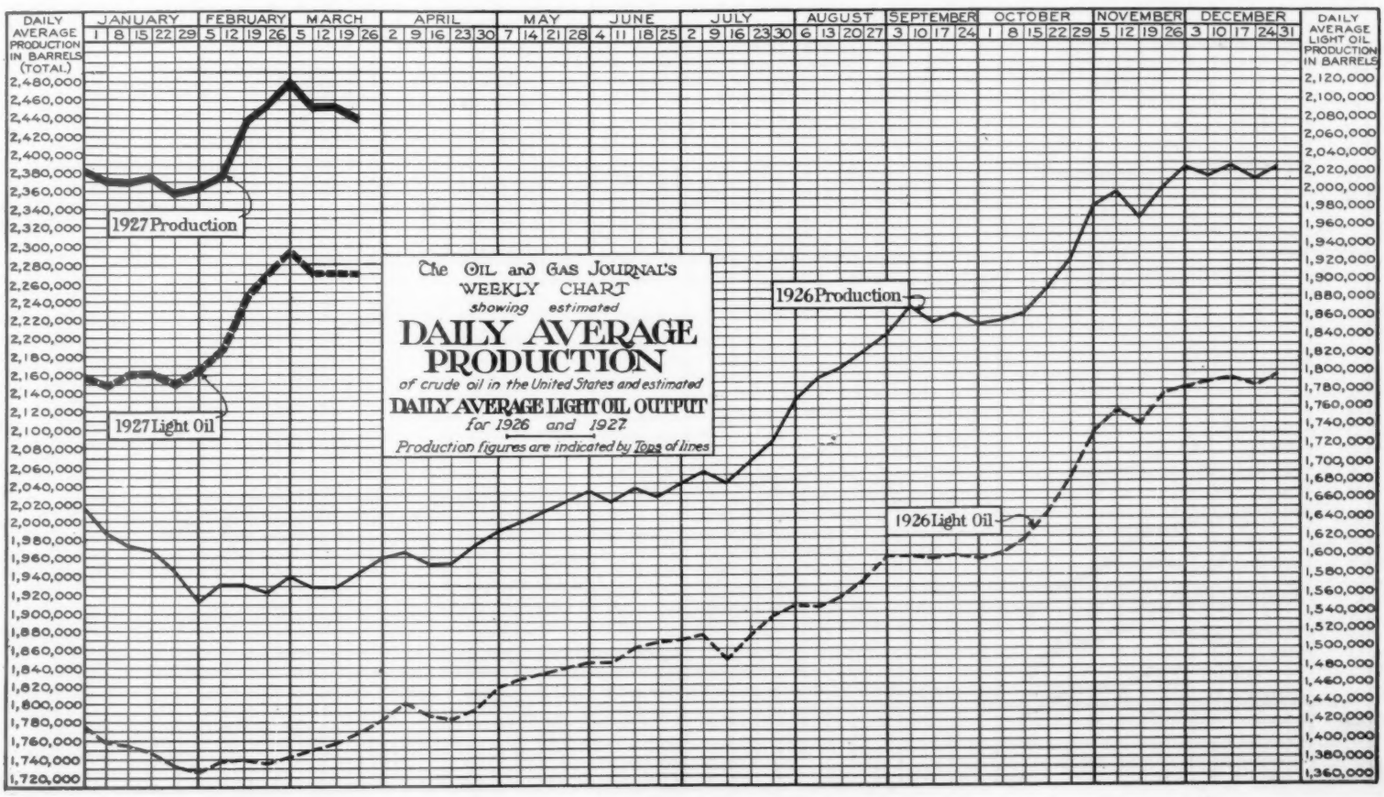
Production of crude oil in excess of demand will continue well into the summer at least, judging from present conditions and, if this situation obtains, more crude will be stored this year than for some time past. Of course there is always the chance something may happen at Seminole to cause a slump in output there but it will not pay operators to bank on any such idea at this time.

### PRODUCTION IN THE UNITED STATES

Estimated daily average production of light and heavy gravity oil in the United States for week ended March 19, and a comparison with the previous week follows:

| | Mar. 19 | | Mar. 12 | |
|---|---|---|---|---|
| | Light | Heavy | Light | Heavy |
| Oklahoma— | | | | |
| Tonkawa | 24,640 | ..... | 24,610 | ..... |
| Burbank | 47,530 | ..... | 48,115 | ..... |
| Other Osage Fields | 35,220 | ..... | 35,040 | ..... |
| Cushing and Shamrock | 21,265 | ..... | 21,235 | ..... |
| Bristow and Eastern Bristow | 27,290 | ..... | 27,295 | ..... |
| Cromwell | 13,605 | ..... | 13,465 | ..... |
| Garber | 17,830 | ..... | 18,425 | ..... |
| Blackwell-Braman | 14,580 | ..... | 15,430 | ..... |
| Seminole | 309,335 | ..... | 309,410 | ..... |
| Wewoka | 18,280 | ..... | 18,115 | ..... |
| Northern Miscellaneous | 109,060 | ..... | 109,385 | ..... |
| Southern Fields | 68,410 | ..... | 68,115 | ..... |
| Total Oklahoma | 707,045 | ..... | 708,640 | ..... |
| North Louisiana | 40,425 | 9,295 | 39,964 | 11,960 |
| Arkansas | 25,925 | 99,005 | 25,000 | 99,070 |
| North Central and West Texas | 250,420 | ..... | 248,490 | ..... |
| Texas Panhandle | 124,480 | ..... | 130,037 | ..... |
| East Central Texas | 40,160 | ..... | 40,715 | ..... |
| Kansas | 115,920 | ..... | 116,410 | ..... |
| Total Mid-Continent Area | 1,304,375 | 108,300 | 1,309,256 | 111,030 |
| Gulf Coast | ..... | 153,758 | ..... | 158,623 |
| Southwest Texas | ..... | 37,225 | ..... | 37,360 |
| Eastern | 105,750 | ..... | 106,500 | ..... |
| Rocky Mountain Area | 91,395 | ..... | 85,755 | ..... |
| California— | | | | |
| Santa Fe Springs | 44,500 | ..... | 44,500 | ..... |
| Long Beach | 92,500 | ..... | 92,000 | ..... |
| Torrance | 6,000 | 19,009 | 6,000 | 19,000 |
| Huntington Beach | 74,000 | ..... | 75,000 | ..... |
| Dominguez | 18,500 | ..... | 18,500 | ..... |
| Rosecrans | 11,500 | ..... | 12,000 | ..... |
| Inglewood | 24,500 | 13,500 | 24,500 | 13,500 |
| Ventura Avenue | 50,000 | ..... | 51,000 | ..... |
| Seal Beach | 32,000 | ..... | 31,000 | ..... |
| Remainder of State | 58,000 | 200,000 | 59,000 | 202,000 |
| Total California | 411,500 | 232,500 | 413,500 | 234,500 |
| Total United States | 1,913,020 | 531,783 | 1,915,011 | 541,513 |
| Grand Total | | 2,444,803 | | 2,456,524 |

→ Total Decrease, 11,721 Bbls.; Light Oil Decrease, 1,991 Bbls. ←



# Fuels and Kerosene Prices Lower

## All Grades Reduced in Oklahoma. Gasolines Fairly Firm First of Week After Record Slump

By C. O. Willson

Without any crude or tank wagon reductions of general importance for a period of 10 days to disturb the market, gasoline prices in Oklahoma (Group 3) the first of this week were firm. The firmness developed following a week of slumping prices in which the high gravity gasolines were especially hard hit.

Last week considerable quantities of U. S. Motor gasoline were sold at a price on a parity with the lowest in the Mid-Continent since that area became a major refining area with the high gravity grades from one-half to 1 cent lower than any previous period in the history of the Oklahoma refining industry.

Sufficient buying developed on Friday and Saturday of last week to remove the lowest priced material from the market, and on Monday and Tuesday of this week buyers were unable to purchase at these bottom quotations. The 58-60 U. S. Motor grade slumped so that considerable quantities were sold in the Mid-Continent and adjoining refining areas on a basis of 6 cents Group 3. This material was apparently absorbed the latter part of last week as several buyers were unable to cover their requirements at that figure early this week.

### Dependent on Crude

What will happen the remainder of this week and month, in the opinion of representative buyers and sellers, is entirely dependent on developments in the crude and gasoline tank wagon markets. The gasoline market is still "shaky" and should the general market weakness in the petroleum industry — a development of heavy crude production — result in another general downward revision of crude price schedules, the gasoline tank car sellers in the Mid-Continent might be induced to again lower their prices.

In regard to the possible tank wagon revision, there are many observers who believe that the present margin between the tank car and the tank wagon and service station prices are too wide with reductions in the latter certain regardless of further reductions in the crude schedules. However, many of these market observers think these possible tank wagon and service station price revisions have already been discounted so far as the refinery tank car market is concerned and they profess to fear only another crude reduction.

As was explained in these columns last week, there unquestionably will be a noticeable pickup in gasoline buying in Oklahoma and other Mid-Continent refining areas just as soon as the buyers feel confident that prices are at bottom. The speed with which the 6-cent material was purchased last week reflects that situation. Should the crude reduction fail to develop within the next 10 days it is entirely possible that sufficient gasoline buying will develop to strengthen that product so that it will not be materially affected by a later revision in crude schedules.

In that connection scattered reports indicate that there has been some reduction in the amount of gasoline being manufactured. One large refiner reduced its crude runs to stills 10,000 bbls. daily and shut down part of its cracking equipment. Two other refiners have shut down their cracking units temporarily. It has been rumored in the trade that there had been a general shutdown of cracking equipment in the Mid-Continent. A careful check made by at least two interested parties failed to substantiate this report. The fact that fuel and gas oil prices are slumping will no doubt prevent any general curtailment of cracking operations.

Probably the most encouraging development in the present gasoline market situation lies in the plans of many of

(Continued on Page 156)

### REFINED MARKET BAROMETER

The past week witnessed another general downward revision in quotations on refined products. Gasoline prices, including export shipments, were lowered from ¼ to 1 cent at refineries in all parts of the country. With present quotations at or below the lowest levels which have prevailed in several of the refining areas since 1914, it is believed that the gasoline market in these sections will not be further reduced. The domestic and export kerosene market continued to record lower prices and average prices are now below the the lowest level reached in 1926. Distillate prices were also reduced fractionally. Outside of the coastal areas, lower prices prevailed on fuel oils and gas oils. Natural gasolines were as weak as the refinery gasolines with prices lower. Neutrals were the product in greatest demand among the lubricants. Important reductions, however, were made during the week on bright stocks, cylinder stocks and neutrals in several areas. Wax continues to be a weak product.

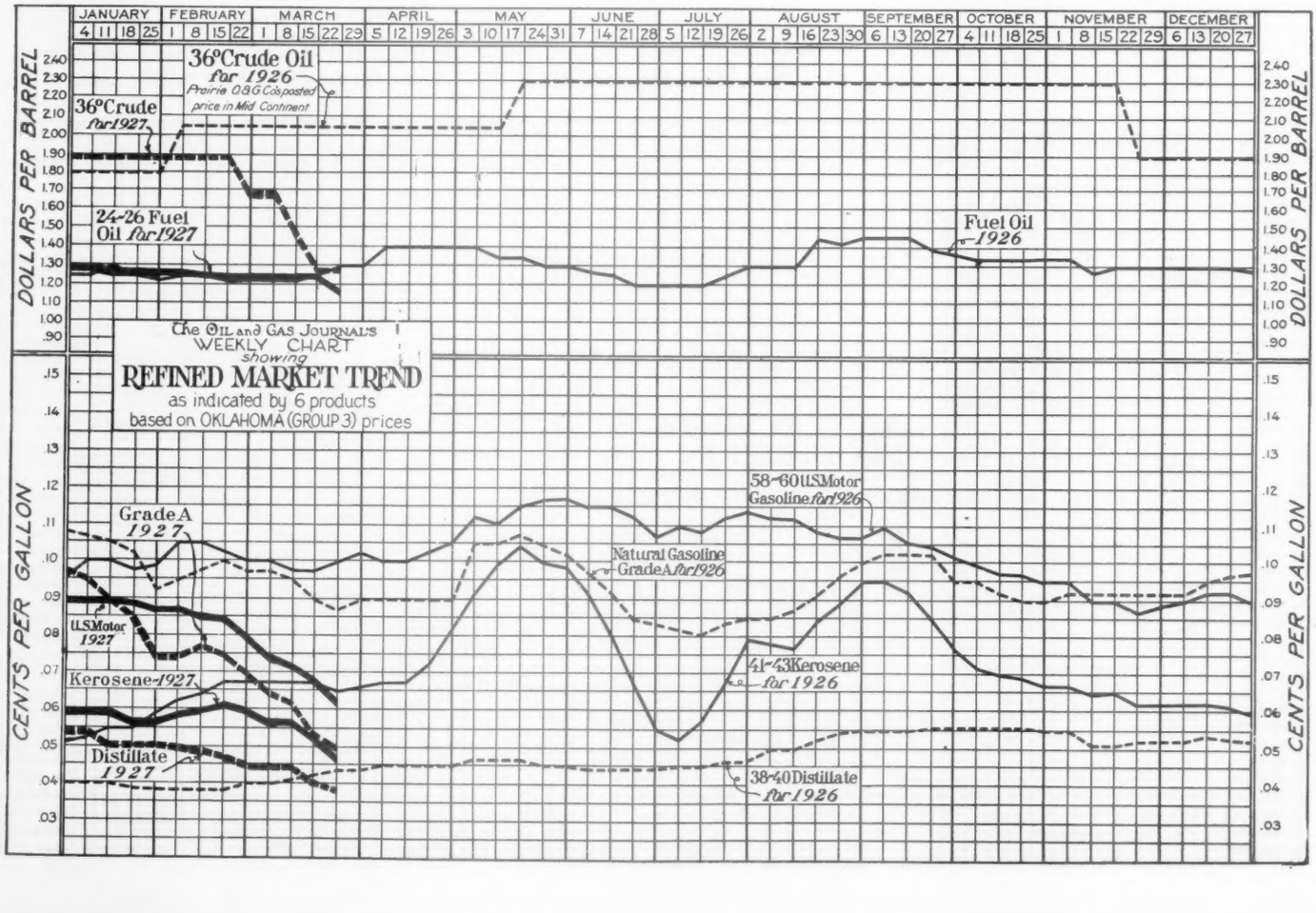
**Mid-Continent**—Refinery gasolines slumped ¼ to ½ cent in all areas. Natural gasoline prices also reduced. Fuel oil prices lower with greatest reduction in north Texas area. Gas oils, distillates and kerosenes lower.

**Atlantic Seaboard**—Domestic gasoline prices lower with 1 cent reduction in export quotations. Kerosene domestic and export prices reduced. Fuel and gas oils firm. Lubricant prices reduced ½ to 1 cent.

**California**—Gasolines very weak following reduction in California tank wagon prices. Both export and domestic prices reduced. Natural gasolines lower. No changes in other products.

**Gulf Coast**—Neutral prices reduced ¼ to 1 cent. No changes in fuels and gas oils.

**Chicago**—Gasolines, kerosenes, distillates, fuel oils and gas oils weak and prices lower on all grades.



# Operation of Air Lift at Seminole

## Most Important Feature in Oil Producing Today. Millions Invested in Equipment

By J. L. Dwyer

The air-gas lift system of flowing oil wells is the most important feature of the producing branch of the petroleum industry today, and although it is estimated that approximately $3,500,000 worth of compressors, engines, and auxiliary equipment is at work in the Seminole Field alone at this time, the system is still in its infancy in the business.

Only 16 months have elapsed since the first installation of the system was made in Oklahoma, but it is destined to exert the widest influence imaginable upon the entire crude oil structure, for it has revolutionized the business of oil production.

After being observed in the various fields of Oklahoma and Kansas, it is thought likely that a large percentage of the oil fields west of the Mississippi River offer possibilities for the use of this system in one variation or another, for like many of the problems connected with oil production, the air-gas lift must be altered to suit varying conditions, and installations and applications which work to perfection under some conditions must be altered to suit others.

This variation is confined to operating changes, and not to the principles of the system, for the laws of thermodynamics which rule and guide the system are as constant, as rigid, and as regular as the similar laws governing the movement and transmission of steam and electricity in the agencies they perform under varying conditions of pressure and current.

### Seminole Tests Severe

Like all new phases of oil-field practice, we have a great deal to learn of this system, but the Seminole Field has given it the most severe tests, and under the tests it has proved effective. It has demonstrated conclusively to the producers that, when flush production is desired and the wells offer conditions favorable to the operation of the lift, it may be expected to produce the oil eight or nine times as rapidly as the methods formerly employed. Whether or not its adoption will mean a greater yield per acre for the lands only time will tell, for in Seminole particularly we are compelled to deal in generalities in making estimates of the future, but it must be admitted that in operating in the Seminole Field the air-gas lift system has given to the oil producers the cheapest oil ever brought to the surface in the history of the Mid-Continent Field.

With a more general application of the system, the intricacies are gradually being brought to light, and engineering skill is constantly delving into the mysteries of the lift. The first general improvement in its use was the adoption of meters for measuring the volume of gas which is being put into the well and also the volume being taken out. A certain definite relation between the two volumes has been traced, and the difference between them is the amount of gas which is being supplied by the oil-bearing stratum.

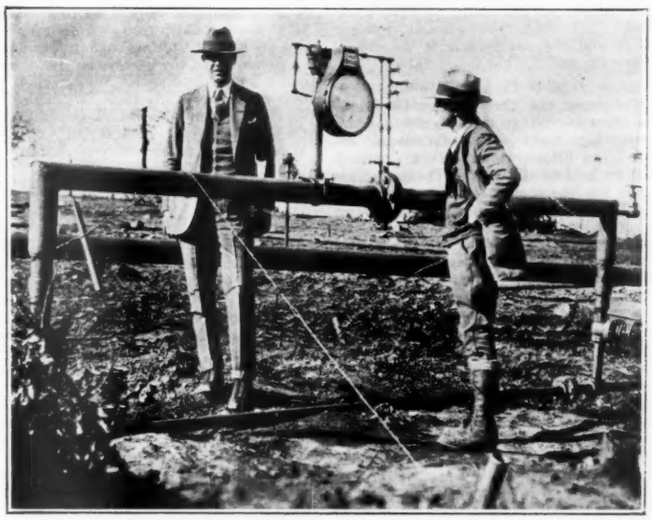
### Meters Prove Worth

A careful study of the input oil-gas ratio and the output oil-gas ratio reveals many interesting facts, and engineers studying these facts are enabled to obtain the greatest efficiency by an observation of these ratio. Meters are now used on practically every installation, and are proving their worth in the proper and accurate recording of results.

The Seminole Field has been observed from every possible angle as far as the air-gas lift system is concerned, and at present it is thought that 60 days additional will be required before any idea of the future possibilities of the wells now being flowed by air-gas lifts will be available.

It is estimated that at present over 150,000,000 cubic feet compressor capacity is installed in the Seminole Field, and additional wells are being prepared for use of the system as rapidly as conditions permit.

The prime conditions necessary for the successful operation of the system is a high static head. By static head is meant the height of the fluid in the hole. It has been contended that the system may be used in any wells having this condition, but that while it will operate admirably with oil in the hole, it most certainly will not draw the fluid from the sand into the hole.



*A meter measuring the output oil-gas ratio at Seminole. C. D. Watson, chief engineer of the Carter Oil Co., in the foreground, and F. O. Prior, assistant to A. W. Peake, general superintendent, Midwest Exploration Co.*

### Use of Compressors

The average well in the Seminole Field using this system is handling about 1,000,000 cubic feet of gas or air per day, and gas is mainly used at Seminole. This requires from one to four compressors, depending on compressor capacity. The majority of the wells are using the smaller types of compressors which require from three to four for each well. The compressors are motor driven and engine driven in this field as electric current is available. As there is no definite idea of the length of time the compressors will operate in the field, they have been housed in temporary structures and set on temporary foundations. The floors of the houses are made of chat, and if the installations are to be permanent, these rapidly constructed structures will give way to steel frame buildings with concrete floors.

There have been so many unusual conditions developed by the use of the lift that to enumerate them all would require unlimited space, but in functioning in this field the lift has performed many incredible feats. On one well which yielded 150 bbls. daily when swabbed continuously, the air-gas lift system was installed, and the flow by this system was 1,800 bbls. daily.

### Wells Very Sensitive

The field has a very limited gas pressure, and the wells are very sensitive. One well was a very poor producer by natural flow. When the air-gas lift was installed it produced 2,500 bbls. daily for several

(Continued on Page 141)

# Restraint on Seminole Unlikely

## State Corporation Commission May Ask Relief for Small Producers. Umpire Collins Testifies

By J. L. Dwyer

OKLAHOMA CITY, Okla., Mar. 22.—It looks reasonably certain that the State Corporation Commission will promulgate no ruling which will entail hardships upon the entire Seminole Field, although it may ask purchasing agencies to assist some of the small producers.

This was the general opinion after the commission adjourned indefinitely, following today's hearing on a complaint filed by the Turman Oil Co. and H. H. Taylor charging through the use of air-gas lift in the Seminole Field overproduction had been brought about resulting in oil in excess of the capacity of common carriers which resulted in dissipation of pressure and waste, and preventing Turman from producing oil, and asking for relief by an order directing the removal of air-gas lift.

### Umpire Collins Testifies

The first witness was Ray Collins, umpire in the Seminole Field, who testified that the present production of the field was 305,000 bbls. and that 275,000 bbls. was being handled by transportation agencies, including 40,000 bbls. by small producers. No oil has been placed on the ground for some time and the greatest difficulty of the field is the failure of producers to keep ahead in a tank construction program. Air is producing 175,000 bbls. and the remainder is natural. Removal of air would prove detrimental to the ultimate recovery of the field. Wells making 50 or 100 bbls. of water cannot successfully be handled by the pump system. Loose sand necessitates frequent pulling of rods and cups. Mr. Collins believes the field has a maximum production of 340,000 bbls. and 8-6 and 9-6 have passed their combined peak. Turman Oil Co. is suffering on account of no storage program. Two million barrels are now stored at Seminole and 40,000,000 bbls. were stored in the time of Cushing overproduction which resulted in a profit on oil at later date.

Mr. Collins gave a brief description of air lift and stated it placed no vacuum or pressure on the sand, but was a lifting method similar to other mechanical means of production and is used in various fields from Arkansas to California without discrimination or complaint. He further said that the ground is the best storage place for crude.

### Replies to Questions

Replying to questions of Turman attorneys he said every effort had been made to effect some agreement without results and conditions now were almost impossible to remedy. The entire state is now producing more than the market absorbs and Seminole is mainly responsible for this. Very few wells with natural flow are pinched in and he believes this detrimental to oil wells but can be performed on new wells without damage. Wells using air decrease 75 per cent when the lift is removed and then replaced. Independent producers built 2,000,000 storage in the field.

Mr. Collins also said potential production in such a field as Seminole was detrimental to the stability of the market and the situation can be improved by drilling up the field rapidly and removing this menace. He believes Earlsboro dry holes give the greatest hope to the situation and estimates the future life of wells on air lift to 5 months.

### Life of Wells

Questioned by T. B. Slick, Mr. Collins said, an extensive wildcatting program also constitutes a menace to the market and he advocated shutting down of all unnecessary wells on top of the sand.

Questioned by Henry McGraw, Mr. Collins said that there are several highs and lows in the field and the sand has no uniformity, offset wells encountering the top 50 and 100 feet low with corresponding low gas pressure, which makes the use of air lift imperative, although an offset well with high top and good gas pressure flows natural. Therefore to remove air would really prove discriminatory to the operator having a well on the low side. Considering present tank building methods, Mr. Collins said in the days of Cushing much loss was caused by poor roof conditions while today vapor tight roofs preserves gravity and reduces volumetric loss of oil.

Mr. Collins was the only witness of the morning session.

### Turman Receiver on Stand

At the afternoon session of the commission the first witness was N. T. Gilbert, receiver for the complaining Turman company, who described the condi-

(Continued on Page 150)

# Geologists Expect Record Convention

## Papers Scheduled Cover Latest Developments in Various Fields. Research and Greater Recovery to Be Discussed

By Andrew M. Rowley

Great advancements made in the application of the science of geology in the petroleum industry will be emphasized this week in Tulsa during the twelfth annual convention of the American Association of Petroleum Geologists which will open formally March 24 and continue through Saturday, with field trips arranged for Sunday, Monday and Tuesday. Advance registrations indicate the Tulsa meeting will bring together the largest number of petroleum geologists ever before assembled while the program arranged for the convention is one of the most extensive and comprehensive ever prepared.

So many papers were scheduled for the regular three days' session of the convention it was found necessary to schedule the meeting of the micropaleontologists for Wednesday, March 23, that group, under the leadership of Henry V. Howe, president, holding round-table discussions Wednesday morning and afternoon.

### Meeting on Research

Another important meeting scheduled for Wednesday morning was the session of the joint committee of the National Research Council and the American Association of Petroleum Geologists on matters pertaining to research work of the petroleum industry. This committee governs and directs the work of research, considering subjects to be assigned to various members of the association for investigation and research. Members of the committee include K. C. Heald, chief geologist of the Gulf Oil Corp., Pittsburgh, Pa.; David T. White, chief geologist of the United States Geological Survey; James H. Gardner, president, Gardner Petroleum Co., Tulsa; E. DeGolyer, president, Amerada Petroleum Corp., New York and president, American Institute of Mining and Metallurgical Engineers; William E. Wrather, independent oil producer of Dallas, Tex.; Carl H. Beal, vice president, Marland Oil Co. of California, Los Angeles; F. H. Lahee, chief geologist, Sun Oil Co. of Texas, Dallas; Alex W. McCoy, vice president, Marland Oil Co. of Colorado, Denver; W. T. Thom, Jr., chief oil section, United States Geological Survey; and Chester W. Washburne, consulting geologist of New York.

Symposiums on the relation of structure to petroleum accumulation in oil fields will constitute an important part of the program of the convention in Tulsa. Papers scheduled include subjects pertaining to the latest developments in the active fields of the country, including Seminole Field in Oklahoma; California, West Texas and other areas now engaging the attention of the petroleum industry as a whole.

### Three Big Banquets

Probably more women will attend this convention than at any previous meeting of an organization connected with the oil business. Most of the geologists will bring their wives or daughters and Tulsa committees have made extensive plans to entertain the ladies.

On account of the large number registered already for the convention, it was found necessary to divide the big annual banquet into three groups, arranged in relation to athletic conferences of the schools and universities. The banquets will be held Friday evening. At the Mayo Hotel, members of the association who graduated from schools in the Missouri Valley Conference, including Oklahoma, Kansas, Nebraska, Missouri and North and South Dakota will hold forth. At the Tulsa Hotel, graduates from schools and colleges from the East and the Big Ten, or practically all from the Mississippi Valley and the eastern section of the country, will gather and boast about their schools. At the Masonic Temple, Seventh and Boston, the yells and cheers will come from graduates of the Southwest Conference, the general western group and the members from the Rocky Mountain and Pacific Coast areas.

### Engage in Theatricals

Following the three banquets, everyone is expected to attend the association's big theatrical performance, entitled the "Rock Hound Revue," which will be held in the Akdar Theater. This revue has the reputation of being one of the best performances given by persons connected with the petroleum industry. Rehearsals of the "stars" have been held for weeks under the direction of a professional and rumor has it numerous surprises will be sprung for the edification and enjoyment of the audience.

On March 1, there were 1,670 members of the association residing in 39 states of the Union and in 23 foreign countries. Texas has the honor of claiming the greatest number with 476 members, Oklahoma comes next with 382, and California third with 210. Colorado, New York, Kansas, Louisiana and Pennsylvania are next in order. Among the foreign countries, Mexico holds first place with 31 members and Venezuela second with 28. The association's far-flung activity is indicated by its members in such distant places as Japan, Rumania, Australia, the East Indies, and the Union of Socialistic Soviet Republics. Of course the South American countries call a large number of the geologists. Besides Venezuela, A. A. P. G. Members are in Argentina, Colombia, Trinidad, Peru and Bolivia.

The retiring officers of the association are president, Alex W. McCoy, vice president of the Marland Oil Co. of Colorado, Denver; vice president, C. R. McCollom, chief geologist of the Union Oil Co. of California, Los Angeles; secretary-treasurer, Fritz L. Aurin, director of the Marland Oil Co. of Oklahoma, Ponca City; editor, John L. Rich, consulting geologist, Ottawa, Kans. The retiring executive committee is composed of these officers and past president, E. DeGolyer, president of the Amerada Petroleum Corp., New York.

During the past year the association established a permanent headquarters in Tulsa, with J. P. D. Hull as manager, in charge.

As the members of the association began to gather in Tulsa there appeared to be a strong movement on foot to elect G. C. Gester, chief geologist of the Standard Oil Co. of California, San Francisco, as president of the association for the ensuing year; Luther H. White, chief geologist of the J. A. Hull Co., Tulsa, as vice president; and David Donoghue, of the Texas Pacific Coal & Oil Co., Fort Worth, Tex., as secretary-treasurer.

### CONDENSED SCHEDULE

**Wednesday**

10:00 to 12:00 and 2:00 to 5:00—Sixteenth Floor, Banquet Hall; Section of Paleontology; Round Table discussion—Henry V. Howe, president.

2:00 to 5:00—Research Committee, Mezzanine Floor—W. E. Wrather, Chairman.

2:00 to 10:00—Registration, Mezzanine Floor.

8:00 p. m.—Business Committee, Mezzanine Floor—F. W. DeWolf, Chairman.

**Thursday Morning**

Registration, Mezzanine Floor.

10:00 to 10:45—Addresses of welcome; Reports by officers; Announcements of new business—Crystal Ball Room.

10:45 to 11:15—Nomination of officers—Crystal Ball Room.

11:15 to 12:15—Technical Session—Crystal Ball Room.

**Thursday Afternoon**

1:30 to 5:00—Technical Session—Crystal Ball Room.

**Thursday Evening**

8:00—Business Committee—Mezzanine Floor.

**Friday Morning**

9:00 to 2:00—Ballot boxes open for votes of officers—Mezzanine Floor.

9:00 to 12:00—Technical Session—Crystal Ball Room.

9:00 to 12:00—Section of Paleontology—Sixteenth Floor, Banquet Hall.

12:00 to 12:45—Departure for golf tournament—Side door Mayo Hotel.

**Friday Afternoon**

1:30 to 3:00—Business Session—High School Auditorium, corner Sixth and Cincinnati.

3:00 to 3:30—Organ Recital, High School Auditorium.

3:30 to 5:00—Technical Session, High School Auditorium.

**Friday Evening**

6:30 to 9:00—Banquets in conference groups; Entertainment "Rock Hound Revue of 1927" and Annual Ball—Akdar Theater and Akdar Temple Ball Room.

**Saturday Morning**

9:00 to 12:00—Technical Session—Crystal Ball Room.

10:00 to 12:00—General Sessions (Groups A and B)—Sixteenth Floor Ball and Banquet Rooms.

**Saturday Afternoon**

1:30 to 4:30—Technical Session—Ball and Banquet Rooms.

**Saturday Evening**

11:00—Special train leaves for Ponca City from Frisco Depot.

10:00—Train for Holdenville and Seminole from Frisco Depot.

**Sunday**

Ponca City—Drive through Tonkawa and other oilfields; 101 Circus.

Seminole—Drive through Seminole oil field.

**Monday**

Ardmore—Field trip through the Arbuckle Mountains.

**Tuesday**

Ardmore—Field trip through Healdton, Hewitt, and other oil fields, or to see geology of the Ardmore Basin.

**Thursday Morning Session**

Crystal Ball Room, Sixteenth Floor, Mayo Hotel, 10:00 a. m. to 12:15 p. m.

Addresses of Welcome:—A. L. Beekly, president, Tulsa Geological Society; H. F. Newblock, mayor, city of Tulsa.

Response—A. W. McCoy, president, American Association of Petroleum Geologists.

Reports of Officers:—A. W. McCoy, president; F. L. Aurin, secretary-treasurer; J. L. Rich, editor; J. P. D. Hull, business manager.

Nomination of new officers.

Technical Session—11:15 to 12:15.

1. New developments in California and their significance, C. H. Beal and A. H. Hellen (to be read by R. D. Reed).

2. New developments in West Texas, Robert Burns Campbell.

**Thursday Afternoon Session**

Technical Session 1:30 to 5:00.

3. 1:30—New developments on the Gulf Coast—Alexander Deussen.

4. 2:00—New developments at Amarillo—C. Max Bauer.

### OFFICERS, AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS

*Left to right: Charles R. McCollom, vice president; Alex W. McCoy, president; E. L. De Golyer, past president; John L. Rich, editor Association Bulletin; Fritz L. Aurin, secretary-treasurer. Mr. McCollom is chief geologist for the Union Oil Co. of California, Los Angeles; Mr. McCoy is first vice president of the Marland Oil Co., of Colorado, Denver; Mr. De Golyer is president of the Amerada Petroleum Corp., New York, and was recently elected president of the American Institute of Mining and Metallurgical Engineers; Mr. Rich is a consulting geologist of Ottawa, Kans.; and Mr. Aurin is a director and chief geologist of the Marland Oil Co. of Oklahoma.*

5. 2:30—New developments in the Seminole district—T. E. Weirich.

Symposium on the relation of structure to petroleum accumulation in oil fields, 3:00 to 5:00

(Authors will be restricted to 15 minutes and discussions to 3 minutes for each speaker).

6. 3:00—California, G. C. Gester and L. G. Gaylord, (delivered by Mr. Gester).

7. 3:20—Elk Hills, California—P. V. Roundy.

8. 3:35—Blackwell, South Ponca, Okla.—S. K. Clark and J. I. Daniels.

9. 4:00—Lost Soldier, Wyoming—J. S. Irwin.

10. 4:15—Copley Oil Pool, West Virginia—D. B. Reger.

11. 4:30—Publicity—Ralph Arnold.

12. 4:45—Pine Island, Louisiana—A. F. Crider.

**Friday Morning Session**

Technical Session—9:00 to 12:00.

Symposium on the relation of structure to petroleum accumulation in oil fields.

13. 9:00—Peabody, Elbing, Urschel, Covert-Seller, Kansas—C. R. Thomas.

14. 9:15—Fort Collins, Colo.—W. G. Gallagher and S. Grinsfelder.

15. 9:30—Paint Creek Uplift, Ky.—I. B. Browning.

16. 9:45—Cabin Creek, W. Va.—Theron Wasson.

17. 10:00—Bellevue, La.—L. P. Teas.

18. 10:30—Illinois—G. F. Mounton and A. H. Bell.

19. 10:45 — Bradford, Pa.—J. R. Newby, P. D. Torrey, C. R. Fettke, and L. S. Panyity.

20. 11:15—Griffithsville and Tanner Creek, W. Va.—E. A. Stephenson and R. E. Davis.

21. 11:45—Garber, Okla.—W. G. Gish and R. M. Carr.

Golf Tournament—Cars leave Mayo 12 to 1—be sure to vote before 2 p. m.

**Friday Afternoon Session**

Business Session, High School Auditorium.

1:30 to 3:00—Business Session (for members only), High School Auditorium, Sixth and Cincinnati.

3:00 to 3:30—Organ Recital—open to all—High School Auditorium.

3:30 to 5:00—Technical Session—open to all—High School Auditorium.

22. 3:30 — Glennpool, Okla.—W. B. Wilson.

23. 3:45—Mexia, Wortham, Currie, Powell, Tex.—F. H. Lahee.

24. 4:05—Homer, La.—W. C. Spooner.

25. 4:20—Desdemona, Tex. — David Donoghue.

26. 4:40—Ordovician Correlations in Oklahoma—Fanny C. Edson.

**Saturday Morning Session**

Crystal Ball Room, Mayo Hotel Symposium, continued.

27. 9:00—Cushing, Okla.—J. N. McGirl, A. F. Truex, A. L. Beekly, and R. R. Brandenthaler.

28. 9:15—Russell, Kan.—T. H. Allan and M. M. Valerius.

29. 9:30—Luling, Texas (Geology and petroleum resources of the San Marcos Quadrangle)—E. W. Brucks.

30. 9:45—South Vernon, Tex.—H. B. Fuqua.

31. 10:00 — The Turkey Mountain Lime, Okla.—Paul Ruedemann and H. E. Redman.

General Papers—Session A.—Crystal Ball Room.

32. 10:30-10:45—Criteria for oil occurrence—F. G. Clapp, 50 Church St., New York.

33. 10:45—Origin of oil in California—C. F. Tolman.

34. 11:00 Stratigraphic position of the "Big Lime" in West Texas—E. C. Edwards.

35. 11:15—Convergence studies in the Mid-Continent Region—A. I. Levorsen.

36. 11:30—Boulders of Ordovician age in the Caney shale of the Ouachita Mountains—E. O. Ulrich, discussed by J. A. Taff and Sidney Paige.

General Papers—Session B—Sixteenth Floor Banquet Hall.

37. 10:45—The oil well decline formula—R. H. Johnson.

38. 11:00—Generation of oil by geological distillation—J. L. Rich.

39. 11:15—Oil possibilities in the Arkansas Valley region, Arkansas—G. C. Branner.

40. 11:30—Calcium chloride waters, Connate and deagenetic—Alfred C. Lane (presented by E. E. Fairbanks.)

41. 11:45—New Appraisal Methods—S. J. Caudill.

**Saturday Afternoon (Two Sessions)**

Session A—Crystal Ball Room.

42. 2:00—Possibility of a southwestern extension of the Cincinnati arch under the Gulf embayment—Wilbur C. Nelson.

43. 2:15—Origin and significance of epianticlinal faults as revealed by experimental study—T. A. Link.

44. 2:30—History of Carboniferous sediments of the Mid-Continent region—M. G. Cheney.

45. 2:50—Recent petroleum activities on the Olympic Peninsula; summary of geology—R. H. Palmer.

46. 3:10—The effectiveness of compaction as a cause of migration of petroleum—R. C. Beckstrom and F. M. Van Tuyl.

47. 3:30—Some problems of the Chugwater-Sundance contract in the Big Horn district of Wyoming—A. E. Brainerd and I. A. Keyte.

48. 3:40—Distribution and correlation of the Mississippian of Oklahoma—G. S. Buchanan.

**Saturday Afternoon**

Session B—Sixteenth Floor Banquet Hall.

49. 2:00—Petrographis study of the pre-Cambrian of Kansas—K. K. Landes.

50. 2:10—Igneous dikes in Bandera County, Tex.—Grady Kirby, J. M. Dawson and M. A. Hanna.

51. 2:20—Western "Redbeds," marine or non-marine?—E. B. Branson.

52. 2:35—Kerogen and its relation to petroleum—G. L. Shue and G. W. Thomas.

53. 2:50—Some questions on the subsidence of the surface of Goose Creek Field, Tex.—L. C. Snider.

54. 3:15—Big Sand Draw, Fremont County, Wyoming—Colm C. Rae.

55. 3:25—Gaptank-Wolf camp problem of the Glass Mountains, Tex.—I. A. Keyte, W. Grant Blanchard, Jr. and H. L. Baldwin, Jr.

SECTION OF PALEONTOLOGY

**Friday Morning Session**

Sixteenth Floor Banquet Hall—9:00 to 12:00.

1. Lowest known Tertiary diatoms in California—G. D. Hanna (Lantern Slides) (15 minutes) presented by Marcus A. Hanna.

2. The use of evolutionary changes in geologic correlation—(15 minutes) N. L. Thomas.

3. Changing characters in some Texas species of Gvembelina—(10 minutes) N. L. Thomas and E. M. Rice.

4. The nomenclature of some common genera of formanifera—(20 minutes, J. J. Galloway.

5. Pleistocene foraminifera from the Lomita Quarry, Palos Verdes Hills, Calif.—(10 minutes) G. H. Doane and S. G. Wissler.

6. A Lower Pico foraminiferal fauna from Southern California—(10 minutes) G. H. Doane and S. G. Wissler.

7. Additional Pennsylvania formanifera of the Glenn formation of Southern Oklahoma—(15 minutes) B. H. Harlton.

8. The value of micropaleontology—(10 minutes) E. O. Ulrich.

9. New faunal evidence from the Tensleep formation, Wyoming—(10 minutes) A. E. Brainerd and I. A. Keyte.

10. Sedimentary petrography in the Gulf Coast region—(10 minutes) Marcus A. Hanna.

11. Small fossils from the Midway formation of Texas, other than foraminifera—(10 minutes) F. B. Plummer.

12. Some general hints on the study of foraminifera for descriptive and cor-

(Continued on Page 155)

## COMMITTEE OF TULSA GEOLOGISTS IN CHARGE OF CONVENTION ARRANGEMENTS

*Standing, left to right: A. L. Beekly, chief geologist, Mid-Continent Petroleum Co., chairman golf tournament; Frank A. Herald, consulting geologist, registration; M. M. Valerius, president, Valerius Oil Co., general chairman; E. W. McCreary, geologist and oil producer, member finance committee; James H. Gardner, president Gardner Petroleum Co., chairman finance committee; Arthur W. Duston, chief geologist, Independent Oil Co., transportation committee; Leroy G. Welsh, chief geologist, New England Oil & Pipe Line Co., reception committee; Wesley E. Gish, chief geologist Sinclair Oil & Gas Co., hotel committee; V. H. Hughes, consulting geologist, decoration committee; T. E. Weirich chief geologist, Tidal Oil Co., ladies' entertainment committee; and Henry Ley, chief geologist, Elmwood Oil Co., vice chairman program committee. Kneeling, left to right; Harry H. Nolan, consulting geologist, manager "Rock Hound Revue;" Richard Hughes, chief geologist and land department, Burke-Greis, chairman banquet committee; A. F. Truex, chief geologist, Twin State Oil Co., stage manager, "Revue;" Luther H. White, chief geologist, J. A. Hull Co., chairman publicity committee; and H. E. Rothrock, chief geologist, Superior Oil Co., guest registration committee.*

# England Encourages Use of Gasoline

## Notwithstanding Need for Revenue, It Abandoned Tax on Motor Spirit and Import Duties

By Charles E. Kern
*Washington Bureau, The Oil and Gas Journal*

WASHINGTON, D. C., Mar. 21.—The British Government evidently looks upon gasoline as a basis product upon which many of the forms of industry are dependent and is determined to place it within the reach of the British public by bringing its cost down to the lowest possible level. This is merely following the traditional policy of the British Government in respect to freedom of trade.

In an extremely interesting and comprehensive study of this subject embodied in a report just received by the Department of Commerce, Homer S. Fox, trade commissioner, located at London, presents convincing facts in respect to the gasoline costs in the United Kingdom, which he says appear to indicate that these costs, both absolutely and relatively, are remarkably low.

This study of English methods showing trade sagacity is of unusual interest at this time in the United States when gasoline taxes are constantly adding to the cost of motor fuel showing aggregate state and municipal taxes from that source to be climbing rapidly toward a $200,000,000 mark. Starting in with a tax of 1 and 2 cents a gallon many legislatures have appeared ambitious to increase this state taxation to 5 cents a gallon, and they are jacking up the tax from year to year toward that figure, some of them having reached it.

"There are at present no taxes on the importation or sale of gasoline in the United Kingdom," states Mr. Fox. "There have, however, been taxes at various times, and there has recently been a rumor to the effect that the new budget this year may reimpose some tax on petrol (gasoline) either in addition to the present horsepower on motor vehicles or in lieu of a portion of this tax."

### Tried and Abandoned

Comment on the course that has been adopted by the British Government shows that it has gone through plans for raising money by the taxation of gasoline, has come to a realization of the ill effect of such a policy upon the public at large and has concluded that it is unwise to add taxation to the cost of an essential article of use both for industrial and private purposes while its refining, distributing and marketing methods have been aiming by various economies to lower that cost.

In explaining operations of British law in this respect, Mr. Fox states:

"The Finance Act of 1909-10 imposed duty and excise tax, respectively of 3d (6 cents) per imperial gallon on motor spirit imported or manufactured locally. This tax became effective June 1, 1909, and on September 22, 1915, both the import duty and the excise tax were increased to 6d (12 cents) per gallon. The excise duty was repealed May 1, 1919, and the customs duty was repealed January 1, 1921. In addition to these taxes, there was imposed, effective August 1, 1915, a motor-spirit users license, amounting to 6d (12 cents) per imperial gallon. This tax was repealed as of May 17, 1919, and was essentially a war measure, under which every user of petrol or other motor spirit was required to obtain a license which specified the quantity which the license holder was permitted to purchase.

"The original duty imposed in 1909, as well as the subsequent increased duty, was effective on all motor spirit imported manufactured, but provision was made that any person using motor spirit for purposes other than the propulsion of motor cars was entitled to an allowance or rebate of the duty paid, and also that an allowance or rebate of half the amount of the duty paid was granted to commercial vehicles, motor cabs or omnibuses, or other vehicles which might come within the designation of a hackney carriage, and for gasoline used by a duly qualified medical practitioner for carrying on the duties of his profession. It is perhaps interesting to note in this connection the definition of motor spirits as given in the Finance Act of 1909-10 upon the imposition of the original duty. Motor spirit in this act was defined as "any inflammable hydrocarbon (including any mixture of hydrocarbons and any liquid containing hydrocarbon) which is capable of being used for providing reasonably efficient motive power for a motor car, and the expression 'manufacturer of motor spirit' includes a refiner of motor spirit and a person otherwise preparing motor spirit."

"In addition to the duties and taxes on motor spirit there was also a motor-dealers' license required before the war, amounting to 5 shillings ($1.25), and a motor-spirit manufacturers' license of 20 shillings ($5) per year. The latter was repealed May 1, 1919, and the former January 1, 1921."

### Different on Continent

This attitude of the British Government is contrary to that of many European countries that have hit upon gasoline as a special source of revenue easily obtained, because this commodity is indispensable, with the result of extortionate prices which politicians, in excusing their conduct undertake to lay at the door of a mythical oil trust.

Mr. Fox credits British oil interests with efforts to lower the cost of gasoline by various economies and improved methods of refining, as well as better distributing and marketing methods which have been introduced in the oil industry since before the war, and in spite of the various reports as to the possibility of early depletion of world oil supplies.

"While the general level of commodity prices in the United Kingdom is now very materially above prewar, the price of petrol (gasoline) shows a very material decline," states Mr. Fox. "According to a series of index numbers compiled by the 'Economist,' the average price level at the end of December, 1926, for several groups of important commodities stood at 155, compared with 100 at the end of July, 1914. In contrast to this, the price of gasoline at the end of December, 1926, stood at 76, compared with 100 at the end of July, 1914.

### Prices Compared

"A comparison of gasoline prices with the retail prices of various items, such as food, rent, clothing, etc., as compiled by the Ministry of Labor in its cost-of-living index, shows the same trend. On the basis of these figures, the average price level in the United Kingdom for all items included in the cost-of-living index December 1, 1926, stood at 79 per cent above the corresponding level in July, 1914. Compared with the general level, gasoline prices showed a decrease December 1, 1926, of 21 per cent from the cor-

(Continued on Page 154)

# Empire Co. Announces Rival Line

## Vice President Straight Says Contracts Have Been Let for Amarillo-Kansas City System

By Special Correspondent

KANSAS CITY, Mo., Mar. 19.—A race to build additional gas pipe lines into Kansas City, Mo., is seen in the announcement that the Empire Gas & Fuel Co. would start immediately the construction of a 20-inch line, at a cost of $20,000,000, from the Amarillo Field to connect with the company's existing lines in Kansas.

The H. L. Doherty interests, suppliers of Kansas City's domestic gas, have entered actively into the industrial gas situation, precipitated by the offer of The Texas Corporation and the Columbian Carbon Co. to lay a 450-mile pipe line from the Texas Panhandle wells and deliver industrial gas at 17 to 30 cents.

Judge H. O. Caster of New York, member of the executive committee of Henry L. Doherty & Co., and Herbert R. Straight of Bartlesville, Okla., vice president and general manager of the Empire Gas & Fuel Co., in company with B. C. Adams, manager of the Doherty interests, has announced that the Doherty company is prepared to offer all the gas to Kansas City for industrial purposes that could be used.

Contracts will be offered to Kansas City industries. To produce the supply necessary, the Doherty representatives said, the company would build a pipe line from the Texas Panhandle to connect with the pipe line system at Chanute, Kans., supplying Kansas City through the regular channels as long as the demand did not exceed the supply. When it did, they explained, another line would be built from Chanute to Kansas City.

### Two Other Offers

The Doherty interests have controlled the gas supply into Kansas City more than a decade.

Since these two interests showed an interest in Kansas City's industrial gas supply there have been two other offerings of industrial gas under stipulated conditions as to consumption, financing and other points. Since the Texas Corp. and Columbian Carbon Co. started circulation of their contracts the Doherty company has begun a drive for that kind of business. A few contracts placed with the Doherty company would make it impossible for any other gas company to achieve the 70,000,000-cubic-foot market necessary to make the project profitable. The present supply in the domestic lines is approximately 50,000,000 cubic feet daily and the consumption is 38,000,000 cubic feet, leaving 12,000,000 cubic feet on which the Doherty interests can carry industrial contracts.

The Texas Corp. and the Columbian Carbon Co., owning 150,000,000 cubic feet of gas in the Panhandle, are ready to build a pipe line to Kansas City to furnish industrial gas only. If a start can be made on the line by April, the Midland Plains Co., through which the other two companies are offering the gas, will have their line completed by December 15, it was stated.

The rates ranging from 17 to 30 cents have been announced and work will begin subject to sufficient contracts to justify the expenditure of $20,000,000, and a franchise from the city.

Representatives of the Midland Plains Co. said that if Kansas City did not desire their proposition the company would of course, be forced to go elsewhere with its supply.

Four separate propositions have been offered the city in the past two weeks.

The Texas Corp. and the Columbian Carbon Co. drove the opening wedge into the Kansas City situation about two weeks ago, with a proposition to furnish industrial gas at rates ranging from 30 cents down to 17 cents, providing the market could be contracted in advance to absorb a minimum of 70,000,000 cubic feet daily.

Their proposition was put before the Chamber of Commerce, which now has a subcommittee investigating the industrial gas question, so recommendation can be made to industries as to entering contracts and to the city council on granting a franchise.

The Chamber of Commerce committee was told the Doherty interests have let contracts for the purchase of pipe for the construction of a line from Amarillo to connect with the company's Kansas City line, 50 miles south of Wichita.

"We will be prepared to care for all domestic consumption and supply from 72,000,000 to 75,000,000 cubic feet additional to meet the industrial requirements of Kansas City," Judge Caster said. "We will offer a tentative schedule of industrial rates to be effective until such time as the company can contract for a total daily consumption of 70,000,000 cubic feet of industrial gas, at which time, a schedule similar to or better than a rate recently offered the committee would become effective."

The pipe line from Texas, the representative added, would provide an outlet for the gas reserve owned by the Empire Gas & Fuel Co. It was asserted by the representatives domestic service would not be impaired by industrial consumption.

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### Mr. Straight's Statement

BARTLESVILLE, Okla., Mar. 19.—That a 20-inch gas line will be built by the Empire Gas & Fuel Co. to tap the resources of the Amarillo, Tex., district and connecting with the present gathering and transportation system of the Empire Gas & Fuel Co., is reiterated in a statement issued by Herbert R. Straight, vice president and general manager of the Empire Companies.

Mr. Straight says pipe and material orders for a 20-inch line which will cost in the neighborhood of $20,000,000 have been placed with the manufacturers and active construction work will be started immediately. It is estimated that completion of the line will require about one year, although every effort will be made to push completion.

It is understood the new line will materially increase the present supply of

(Continued on Page 92)

# Burbank Field Is Not Yet Defined

## Close-in Acreage That Looks Promising Will Be Offered at Osage Sale March 28. Many Wildcat Tracts

James McIntyre

The next sale of Osage oil leases, to be held at Pawhuska, Okla., on Monday, March 28, will include 43,325.41 acres on the east side of the county and 31,238.90 acres on the west side. It is safe to assume that a large majority of leases will be "passed," that no bids will be offered on them. According to law, 100,000 acres must be offered for sale annually, and in order to do this many quarter sections are put up as a matter of form without hope of getting bids on them.

Tract 338, the southwest quarter of Section 27-27-6 is expected to command a large price, but not comparable with prices that have been paid for acreage in Burbank in past years. It is close to the Kewanee Oil & Gas Co.'s good properties in Section 34-27-6. Tract 337, adjoining 338 to the east, will also bring a good price.

The sale will commence at 9:30 a. m. and will continue until all tracts have been offered.

### Many Wildcat Leases

Many wildcat leases on the far west side of Osage County will be offered at the coming sale. In the farthest northwestern township, 29-5, seven quarter sections will be offered. There are two dry holes below 3,000 feet, one of them, SW cor. Section 14, being 3,350 feet deep, near Tracts 412 and 413.

In Township 29-6, where there is some production in Section 17, leases will be offered in Sections 15, 24, 27 and 30, 16 tracts in all; in Township 26-7, leases in Section 17 and 18, 21, 23 and 32, 16 tracts in all, with no production anywhere in the township, nor any drilling indicated on the map.

In Township 29-8, with no dry holes deep enough to have given the area a complete test, leases will be offered in Sections 19, 21, 22, 25, 26 and 28, six tracts in all. In Township 28-5, directly north of the Burbank Field, tracts in Sections 1, 2, 14 and 27 will be available, 10 leases in all. There is a dry hole at 3,027 feet in the SW cor. SE Section 3 and another at 2,998 in SW cor. SE Section 34. Within 4 miles of the west side of the Burbank Field, leases in Seciton 14, 16, 23 and 28, Township 26-5, 12 tracts will be put up, and also a quarter section close to the Burbank Field, the southeast quarter of Section 27-27-5.

In Township 25-5, the Pawhuska agency picked upon Sections 6, 14, 19 and 32 for 11 leases. There have been signs of production in Section 12, but a 3,468-foot dry hole in the SW cor. NW Section 12; a 3,605-foot duster in NE cor. SE Section 27; a 3,610-foot failure in the NE cor. SE Section 36, and one at 3,527 feet in the SW cor. NE Section 33. Four leases will be offered in Section 3-24-5. There is a dry hole at 3,300 feet in NE cor. SW Section 5. In Section 36, two fractional leases on the banks of the Arkansas River and two quarter sections in Section 36 are to be offered.

In a big bend in the river, in Sections 7, 16 and 27-5-3, with a 4,002-foot dry hole southeast of them, 12 tracts will be offered.

Several dry holes are to be found below 3,700 feet in Township 26-4, where six tracts in Sections 28 and 29 are on the bill of fare.

Township 25-4 seems to be free of deep failures and tracts in Sections 11, 24, 26 and 34 are strictly wildcat.

Township 24-4 shows a 3,400-foot dry hole in Section 12, but four leases are offered in Section 11, while Section 19 and 34 also will be put up in quarters.

Close to the river and in virginal territory, tracts in Sections 5, 8, 10, 18 and 20 will go in the grab basket.

East of a direct line between the Burbank and the Fairfax Pools tracts in Sections 11, 14 and 25-26-6 are on the sale program, also tracts in Sections 24 and 35 east and southeast of the Fairfax Pool.

Only two tracts are offered in Township 24-6, all in Section 21. There is a dry hole at 3,344 feet in SW cor. NE Section 15. Sections 5, 22, 33 and 35, 16 tracts in all, are chosen in Township 23-6, all real wildcat pieces.

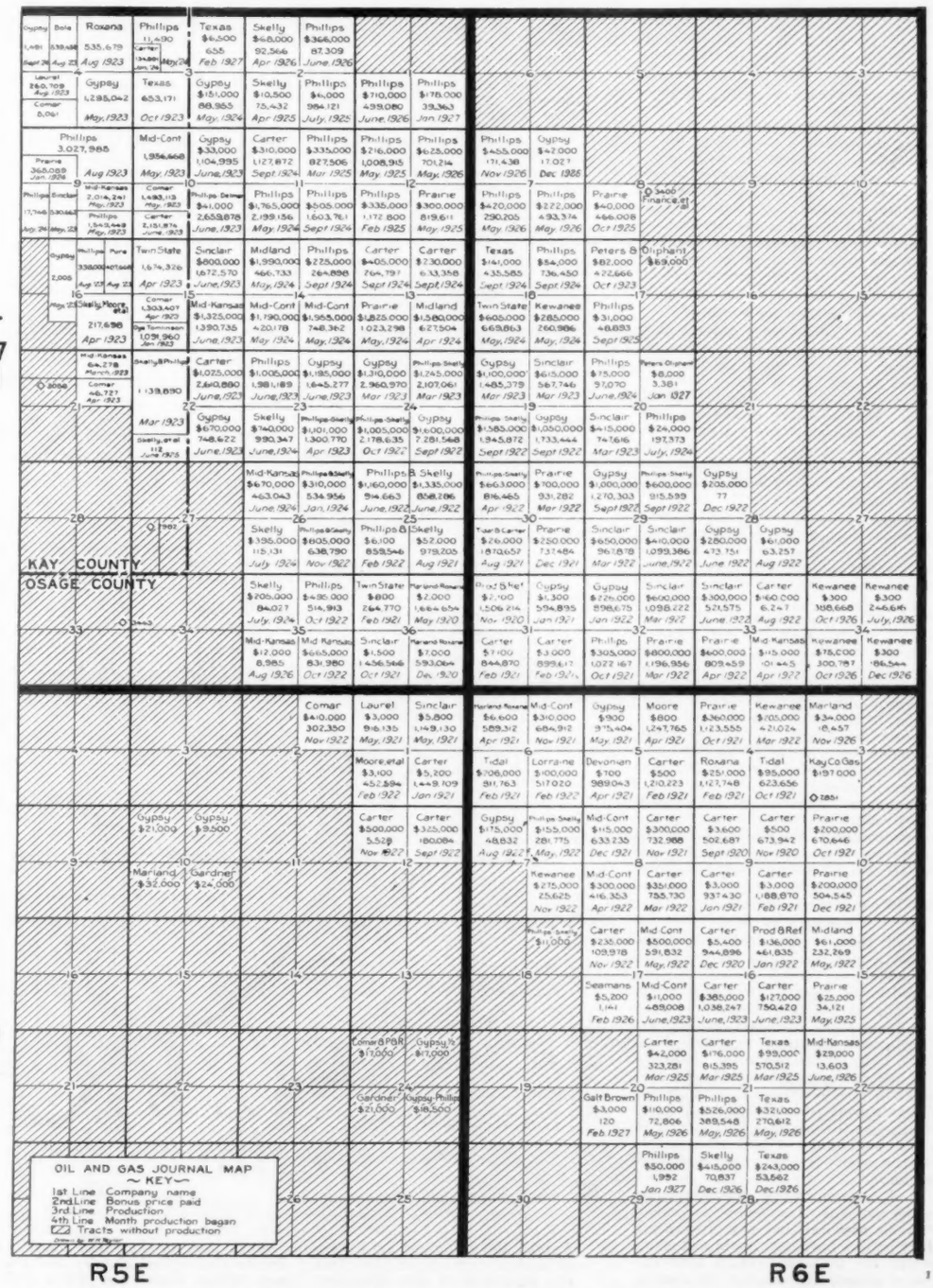
In the Grainola district, Township 28-6, where there is a 3,594-foot failure in the center of Section 20 and a 3,010-foot failure in Section 27, tracts will be offered in Sections 5, 10, 17, 21, 28, 29, eight in all.

### East of Burbank Field

East of the Burbank Field, but far enough to be in the wildcat class, tracts in Sections 3, 14 and 15 will be put up, while the southwest quarter of Section 6, southeast quarter of Section 17, the south half of Section 27 close to the Burbank Field will be included, and in the township south, Township 26-6, leases in Sections 3, 11 and 15 are near enough to attract notice.

In the Foraker district, Township 28-7, Sections 3, 16 and 33 will be offered in quarters, all of them wildcat, and in the Blackland area, Township 27-8, Sections 11, 19, 23 and 27 were selected from

(Continued on Page 89)




*The Burbank Field, showing ownership, bonus prices, production and date of first production.*

# Potash May Make Dry Hole Profitable

## Oil Producers and Oil Geologists Interested in Possibilities Indicated in Southwest

By V. H. McNutt
*Consulting Geologist, San Antonio, Texas*

### SUGGESTS LEASES COVER POTASH AND SAMPLE FORMATIONS BE KEPT

The search for potash in the Southwest Permian Basin, which comprises parts of southern Kansas, western Oklahoma, western Texas and southeastern New Mexico, is stimulating national interest. There are those who believe that deposits will be developed somewhere in this great basin of Permian sediments which will make us independent of foreign potash.

The possible occurrence of commercial potash deposits in the Southwest Permian Basin is of timely interest to two large groups of readers of The Oil and Gas Journal, namely—oil producers and oil geologists.

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The oil producer is financing the drilling of many wildcat wells for oil in this area. If he makes his leases cover potash as well as oil and gas, and if he insists on complete samples of formations being kept on his wells drilled, he may profit by the discovery of potash in a "dry hole."

If commercial potash is found in this region, it will probably be in fairly well bedded deposits in the rock salt. Potash occurs as a sediment and for this reason an intelligent attempt to locate potash deposits must be based upon a knowledge of how sediments were deposited. It has long since been generally accepted in oil finding that a trained geologist with good common sense can greatly increase the oil operators' chances for discovering oil.

The oil geologist has more than any other type of geologist studied sedimentation in the rocks in connection with his search for oil and gas. It is reasonable then that should the production of potash in the Southwest Permian Basin become a mammoth industry in time, as some think it will, geologists for directing these explorations would logically be chosen from the ranks of Mid-Continent oil geologists.

Believing, therefore, that information obtained by the oil operator and the oil geologist may possibly be the means of developing a new industry, The Oil and Gas Journal is submitting what it believes to be a timely article.

Our knowledge of potash came from the Germans, pioneers in this field, who have controlled and dominated the potash industry since its beginning.

Potash is the trade name for oxide of potassium (K20), and is the term used by chemists to establish a basis of comparison for all salts of potassium.

Potash is used principally as a fertilizer and plant food, about 90 per cent of the world output. A balanced fertilizer contains three essential constituents—nitrogen, phosphorous and potash. A soil may be rich in two of these ingredients and lack the third. Such a soil to produce efficiently must have the third constituent added. Different soils require different percentages of nitrogen, phosphorus or potash.

Besides plant feeding, about 10 per cent of the potash is used in the manufacture of alum, potassium bromide, potassium cyanide, potassium chlorate, potassium carbonate, potassium permanganade and other compounds widely used in medicine. Potash is used in the manufacture of aniline dyes, gunpowder, matches and paints and in the extraction of gold from its ores by the cyanide process and in many forms in the arts and sciences.

**Increasing Need for Fertilizer**

The use of potash as a plant food is increasing each year as the necessity for fertilizing becomes more acute. The farmers of the United States have not yet generally felt the necessity for fertilizing. The necessary constituents for balanced fertilization are yet present in our soils. Every crop, however, depletes these fertilizing agents, and, without addition by fertilizing, our farm land would all eventually be "worn out."

In appreciation of fertilizing to produce maximum plant yield many foreign nations, including Germany, Belgium, Norway, France and others are far ahead of the United States in production per acre of crops, due principally to better fertilization, the smaller acreage of tillable land and the cheapness of fertilizers there.

The United States can produce unlimited supplies of nitrogen as cheaply as foreign countries by installation of equipment and developing of electric power similar to the Muscle Shoals project; it possesses the largest known deposits of phosphate rock in the world in Idaho, Florida and elsewhere from which phosphorus is readily obtained, but so far Germany and France, because of their potash deposits dominate the world's potash market. The United States imports from these countries annually about 250,000 tons of potash valued at approximately $15,000,000, while it produces only 10 per cent of that amount.

**Research to Date**

Until comparatively recently in the United States practically all the money and effort to develop potash was expended in three general lines of research:

1. By producing potash as by-products from sugar, molasses, cement and blast furnace operations, the potash being solely a by-product in these industries.

2. Producing potash from evaporating inland lake or sea brines and concentrating the soluble potash which occurred in small quantities in the brines. Much potash was recovered from these brines, but at a relatively great cost (about $120 per ton.)

3. By attempting to reduce primary potash minerals (insoluble) to soluble form by chemical and heat treatments. Many patents have been issued and plants erected for producing potash from this type of potash minerals, but the cost exceeded the value of the potash produced.

Another attempt to produce potash was made by the United States Department of Agriculture by kelp culture along the Pacific shores. The giant kelp (sea weed), very rich in potash was grown for its potash content. This method of obtaining potash was also relatively expensive.

Millions of dollars of American money have already gone into attempts to develop a potash industry by one or another of these processes. Practically no money has yet been spent in an attempt to find water-soluble potash in solid form in the United States, and yet more than 97 per cent of commercial potash of the world is being derived from water-soluble potash in solid form. The excellent work done so far by the United States Geological Survey in this line in the past six years has been handled at a total cost of practically $25,000.

The recent Shepherd bill put through Congress, appropriating $100,000 yearly for five years to further potash explorations in the Southwestern Permian Basin is totally inadequate. Such a pitiful amount set aside for potash work means that our representatives in government have no confidence the United States can produce potash profitably. Private American initiative and capital will continue to do for the United States what foreign governments generally do for themselves, take the lead in demonstrating the presence of national resources.

**Occurrence of Potassium**

Potassium is a widely and abundantly distributed element. It is estimated potash comprises about 3 per cent of the earth's crust. From the standpoint of natural occurrence potash minerals may be divided into two groups: (1) Primary

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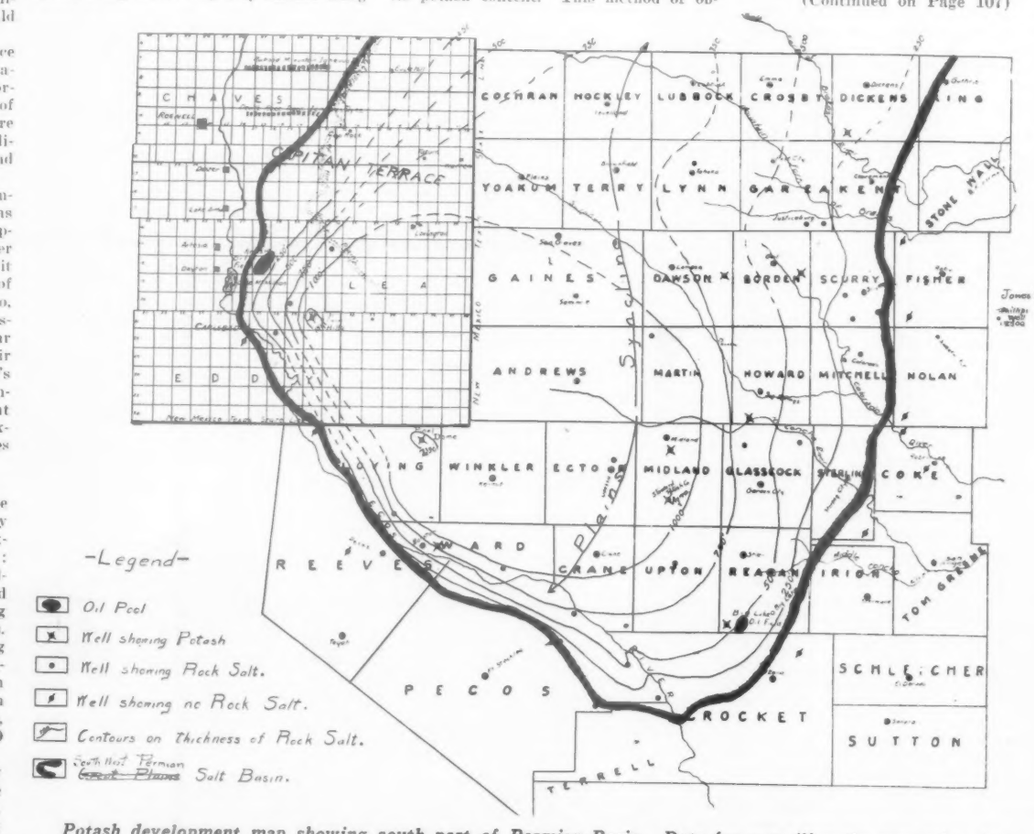


*Potash development map showing south part of Permian Basin. Data for compiling the map taken from published records of the United States Geological Survey and private files of Vernon H. McNutt, consulting geologist of San Antonio, Texas. Pinal Dome and Twin Hills, shown on the map, are areas of the thickest salt and richest potash yet found in the United States.*

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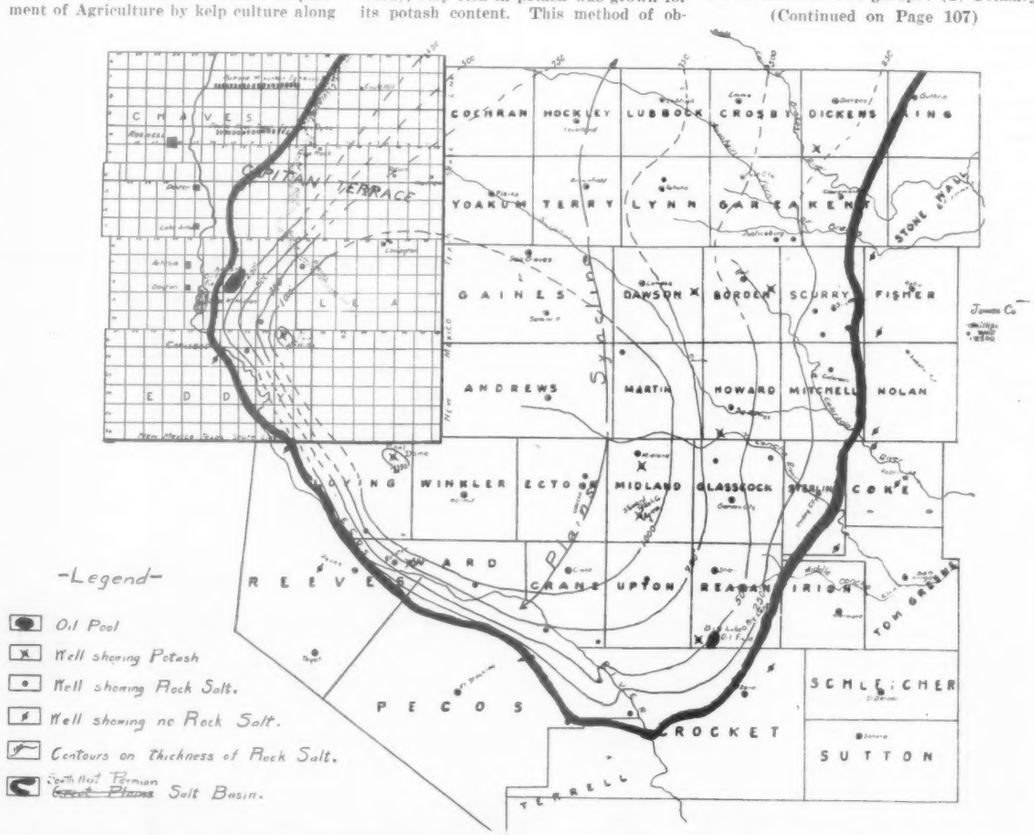


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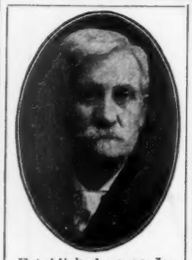

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## TAXED TO A STANDSTILL

High taxes as a hindrance to business have been demonstrated to the American people since the war. Every reduction of taxes at Washington has been forced by the experience that high taxes were keeping up prices and limiting investment in productive enterprises, affecting the general prosperity of everybody.

No one familiar with politics will attempt to deny that the people could and do get a great deal more for their money in almost any other line than in taxes.

Much of the money paid in taxation is foolishly or wastefully expended. Administrative costs are high, often recklessly extravagant. Besides what is spent unnecessarily there is the waste of inexperienced and inefficient administration, and the belief that "Uncle Sam," or the state, county or city, as the case may be, does not need to haggle about economy and it is all right for anybody to get as much out of the public treasury as possible.

Everybody understands that work done under politics costs more and is worth less.

The gasoline tax, which so many legislatures are now trying to increase, is a case in point.

The public has been lulled to sleepy acquiescence by the thought that this money is being spent to build good roads, and seeing the people so easily satisfied the tax levying bodies have hastened to take advantage of the opportunity.

The original cent-a-gallon tax did not seem much but successive increases have now got it averaging above two and a half cents a gallon with every indication that within five years the tax everywhere will be a nickel a gallon, as it now is in some states.

Pennsylvania added a new wrinkle when it doubled its tax as "an emergency measure." Now Texas has trebled its tax on the same plea but unsophisticated citizens of those great states are going to learn that the emergency, so far as the political need for that higher tax is concerned, is going to be permanent. It's a way taxes have. It is easy to put them on but mighty hard, if not impossible, to take them off.

South Dakota, that was so wrought up about cheap gasoline not so long ago, is now going to pay its politicians four cents instead of three cents a gallon gasoline tax beginning in July.

The taxes on gasoline collected last year, with four of the most populous states without a gasoline tax, aggregated over $205,000,000. With the increases already made and others in prospect this year the total will be much greater.

Including the gasoline tax, motorists and the oil industry are at present paying over $735,000,000 in taxes.

Our good roads building program is costing a billion dollars a year.

Motor car, truck and bus owners are paying the lion's share of this bill but we are all gainers by improvement in transportation, whether we own a car or not. It is no longer plausible to say that pleasure car riders should pay for the roads because they only use them.

The quicker turnover that is revolutionizing manufacture and business in every line is attributable to speedier transportation, which in turn is due largely to the growth of motorized traffic.

But if good roads are desirable and a gasoline tax is justified for building them are we getting our money's worth? Has experience encouraged faith that doubling or trebling the tax on gasoline will double or treble our roads?

Between 1914 and 1926 we increased the number of our motor cars 10 times and we have had the taxation on motorists, gasoline, etc., increased 50 times. But the improved road mileage has increased but once, or just doubled.

A billion dollars a year for roads is impressive but when it shows only 10,000 miles of new roads, and only 6,000 of these paved roads, it is not so good.

Before the people allow the legislatures to jump the tax on gasoline it might be well to ask for a showdown on what is being paid.

The oil industry is interested in getting at the facts in this gasoline taxation business. It is a big contributor because it furnishes at its own expense the machinery for the collection of this tax. Ordinarily the fees, commissions, or expenses of official tax collection make quite a dent in the total revenue received but the oil companies save the state this money by collecting the tax on gasoline without any return.

People sometimes say the consumers pay the tax and the oil companies need not care, but is this true?

Can any industry ignore the effect of a tax that is, just now, more than the producer of the industry's raw material gets for all his effort?

With gasoline quoted at Mid-Continent refineries at 6½ cents, a three-cent tax is almost half as much as the producer of the crude oil and the manufacturer of gasoline together get for all their risks, investments and labors.

A nickel-a-gallon tax, which seems to be the aim of the various legislatures as soon as possible, will mean one-fourth of the price of gasoline sold at 20 cents at the filling station. And an unthinking public will complain about the price, blaming the oil industry, when the public's own representatives have boosted the cost 25 per cent.

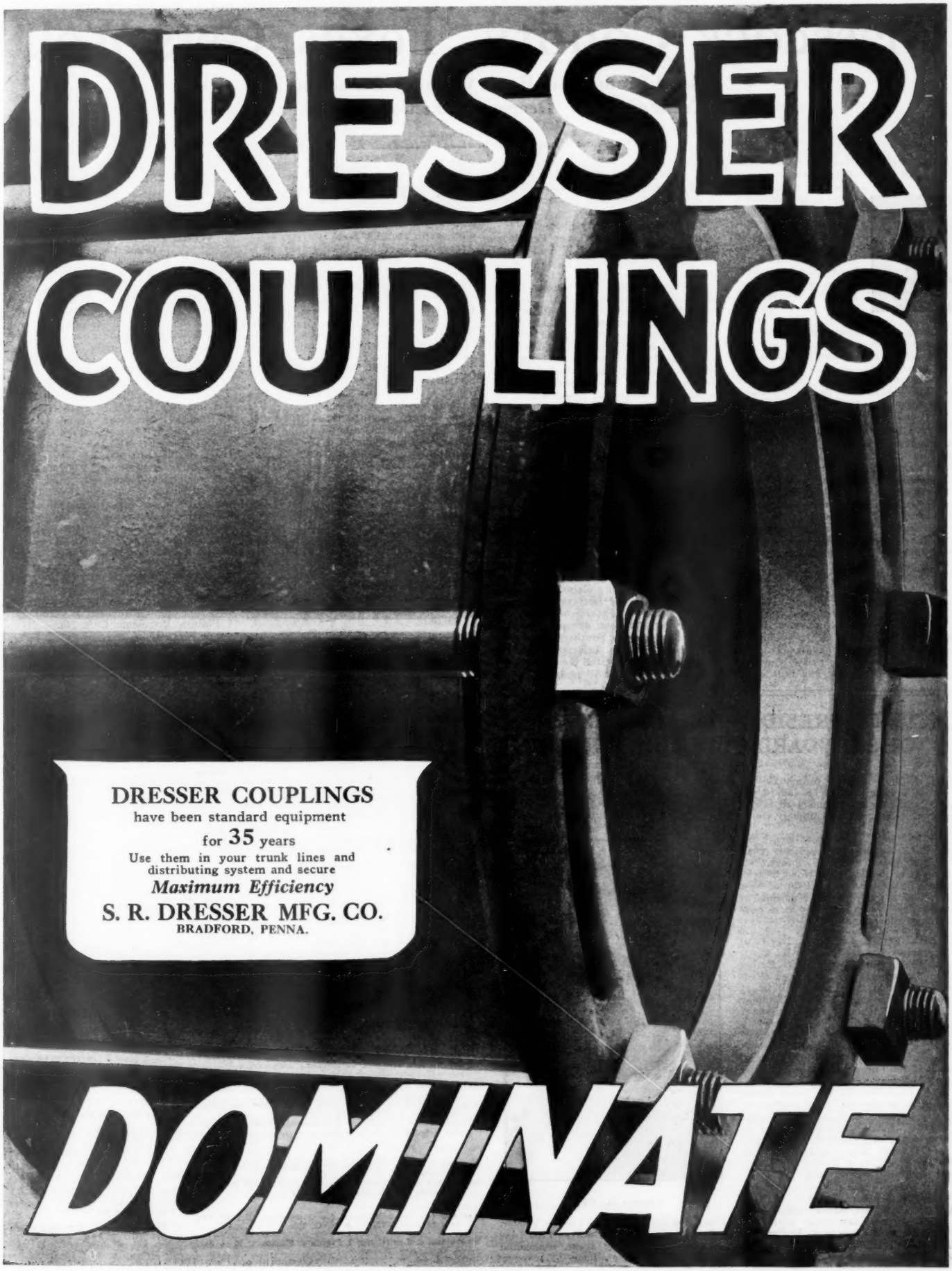
It has been said that a tax is not too high when the people pay it and that they will pay a nickel a gallon tax on gasoline as readily as one cent.

It is not a question of willingness but of ability. Ten gallons, 50 cents a week, would be $26 a year. There are hundreds of thousands of gasoline consumers who would feel obliged to cut down their motoring by any such tax. A tax to build roads so high as to keep people from using the roads would be a curious outcome.

Isn't it possible we may have the wrong idea about this taxing of gasoline and that some more equitable method of finding money for road building can be found?

New York, for instance, has splendid roads without ever having had a gasoline tax. England, after trying a tax on gasoline, both during the war and in peace, decided to abandon it, preferring to encourage the use of gasoline, shrewdly calculating that the country would be better off with the accelerated transportation.

Seeing what we have gained by the use of gasoline, can we afford to check that progress by allowing it to be taxed to a standstill?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# Glasscock County, Texas, Gets Well

## Good Producer in Pecos County. Extension in Crane County. Deeper Production in Callahan

By C. D. Lockwood
*Staff Correspondent, North and West Texas*

FORT WORTH, Tex., Mar. 21.—The addition of an excellent producer to the Yates Pool of Pecos County, the entrance of Glasscock County into the list of producing counties, the extension of the Gulf-McElroy Pool in Crane County about half a mile southeast, and the discovery of good production through slightly deeper drilling in Callahan County, about 5 miles west of Cross Plains, were some of the high lights of the week in North and West Texas.

Production of the West Texas district was 83,685 bbls., with the big producers in the Church & Fields Pool of Crane County and the Yates Pool of Pecos County partially pinched in.

Production of the Wichita Falls district rose to 102,315 bbls. daily as a result of nice wells in various districts. It is interesting to note that Cooke County is now producing 1,400 bbls. daily from its Bulcher and Muenster Pools.

Production of the Central Texas or Ranger-Eastland district averaged 64,420 bbls. during the past week, Brown County having led the district with 23,550 bbls. daily.

The well which put Glasscock County on the production map is Texon Oil & Land Co. and Marland Oil Co.'s No. 1 Settles, in Section 160, Block 29, about 5½ miles southwest of the nearest Howard County producer. This well was mentioned last week as having oil in the hole. It was put on the pump Thursday after packer had been set and in 6 hours pumped 70 bbls. Friday it pumped 160 bbls. in 18 hours and Saturday 97 bbls. in 12 hours. The depth is 1,235-63 feet. It is in the middle of a practically solid 10-section block.

### Howard County Show

In Howard County, Comet Petroleum Co.'s No. 1 H. R. Clay, NW cor. Section 154, Block 29, was testing an oil showing Monday at 1,815 feet.

In Pecos County, Mid-Kansas Oil & Gas Co. and Transcontinental Oil Co.'s No. 3 Yates, 535 feet east of the discovery well, has been drilled to 1,073 feet in sand topped at 1,000 feet, and Monday flowed 607 bbls. This well is down dip from Nos. 1 and 2, the latter being 535 feet west of No. 1 and the highest on the structure so far. Nos. 1 and 2 are shut in but the tremendous pressure back of No. 2 which gave it an initial production of better than 6,700 bbls., is causing it to leak about 64 bbls. daily through the gate.

The same companies' No. 1 Account 2, in the SW of Section 61, north of the discovery, was opened up last Friday and flowed 267 bbls. for the 24 hours ended Saturday morning. Total depth is 1,223 feet.

Cromwell & Kimberlin's No. 1 Blackman, C NW Section 24, Block 3, topped the salt at 890 feet. Crosby Drilling Co.'s No. 1 Yates in Section 72, Block 1, has a flat hole at 885 feet.

The Winkler County discovery well has been deepened a few feet every few days for the past two or three weeks and is now flowing 390 bbls. at total depth of 3,040 feet. This is Southern Crude Oil Purchasing Co.'s No. 1 Hendricks-A, SE cor. Section 42, Block B 5. The second well in this vicinity will probably be the Gulf Production Co.'s No. 1 Hendricks, diagonal southeast offset, which was drilling out cement at 2,690 feet Monday.

In Crockett County, World Oil Co.'s No. 1 Schneeman, Section 57, Block BB, encountered bad news in the form of sulphur water at 2,490 feet.

The Gulf-McElroy Pool extension is No. 6 J. T. McElroy, C SW SE, Section 197, Block F, Upton County side of the line. It flowed 685 bbls. by heads from pay topped at 2,709 feet and drilled to 2,763 feet, with the big pay at 2,745-47 feet. No. 5 Crier-McElroy in C NW NE, Section 204, pumped 120 bbls. the first 21 hours at 2,905 feet, the crude testing 31.8 degrees gravity. Location was made for No. 6 Crier-McElroy, C NW NE, Section 196, and for No. 4 Crier-McElroy-A, C NW NW, Section 198. Rigs for both are on the ground.

In Howard County, Gulf Production Co.'s No. 2 Otis Chalk flowed 23 bbls. through 2-inch tubing at 1,775 feet.

In Callahan County, Mook-Texas Oil Co.'s No. 1 Baum, which was a 30-bbl. well at 1,650-56 feet, was deepened a little and found a second pay at 1,667 83 feet which flowed 10 bbls. an hour. The Prairie Oil & Gas Co.'s No. 1 Baum was also deepened to this pay and found it at 1,678-94 feet, where the well swabbed and flowed 270 bbls. This was formerly a 5-bbl. completion at 1,656-76 feet. Both of these wells are to be deepened, and several others in the immediate vicinity, which is 5 miles west of Cross Plains, are to be put down in search of this good production.

In Ward County, Marland Oil Co.'s No. 1 Sealy, Section 78, Block A, G. M. M. & A. Survey, topped salt at 1,100 feet, 96 feet lower than the depth at which it was found in F. P. Zoch's well on the Winker County side of the line.

### WEST TEXAS COMPLETIONS

#### Crane County

Church & Fields' No. 1 University, SW cor. SE SW, Section 34, Block 30, University land, swabbed 90 bbls. at 2,924-3.000 feet. Magnolia Petroleum Co.'s No. 4 O'Keefe-University, NW SE NW, Section 38, Block 30, swabbed 60 bbls. at 2.950-92 feet; same company and others' No. 4 University, NE SE SE, Section 34, same block, was completed for 35 bbls. at 3,000-52 feet.

Marland Oil Co.'s No. 2 Hughes-B had a hole full of sulphur water at 2,400 feet and was plugged at 2,425 feet; No. 4 Hughes-C was also abandoned and plugged at 2,460 feet. Tidal Oil Co.'s No. 1 University-F, NE cor., Section 46, Block 30, flowed 3,906 bbls. the first 24 hours after deepening to 2 902 feet and was completed, top of pay being 2.857 feet. Stidham & Thrasher's No. 1 University, NW cor. SE, Section 45, Block 30, was completed for 18 bbls. on the swab after shooting twice, the first time with 100 quarts at 2,939-65 feet and the second time with 200 quarts at 2,914-67 feet.

#### Fisher County

Baldridge, Dillard & Clark's No. 1 Weller, in the George Great Survey No. 221, was dry and plugged at 3,185 feet.

Phillips Petroleum Co.'s No. 1 Beas-

## DEATH OF PRESIDENT C. K. CLARK OF STANDARD OIL CO. OF LOUISIANA

BATON ROUGE, La., March 21.—C. K. Clark, president of the Standard Oil Co. of Louisiana, was found dead in the bathroom of his residence Monday morning.

Mr. Clark had been in poor health for some time. Sunday he frequently complained of pains about his heart, but spent most of the day with W. C. Teagle, president of the Standard Oil Co. of New Jersey, and a party of other officials of the New Jersey company who were here on an inspection trip.

SHREVEPORT, La., Mar. 22.—Funeral services for the late C. K. Clark will be held at the Scottish Rite Cathedral in Shreveport at 3:30 o'clock Wednesday afternoon and burial will be at Greenwood Cemetery. Knights Templar will form an honor guard. Standard offices will be closed all day Wednesday and company executives and officials will attend the ceremonies in a body. Following announcement of Mr. Clark's death, officials at the Shreveport office including F. Ray McGrew, president of the Standard Pipe Line Co.; R. W. Lowe, superintendent of production; D. C. McGarity, chief accountant; T. M. Milling, general attorney; W. A. Stratton, assistant to the president; and Clem S. Clark, only son of Mr. and Mrs. Clark, and other close friends left in a special for Baton Rouge and will return with the body. W. C. Teagle, president, and other officials of the Standard Oil Co. of New Jersey who had left Baton Rouge Sunday night after a day spent with Mr. Clark, are expected to attend the funeral.

Charles Kelly Clark was born in Coolville, Athens County, Ohio, May 19, 1865, and attended Thiel College at Greenville, Pa. He began work at the age of 20 as a common laborer with the National Transit Co., then to the Southwestern

Charles K. Clark.

Pennsylvania Pipe Line Co. as gauger, and from there to the Buckeye Pipe Line Co. as oil purchasing agent, connection

(Continued on Page 155)

## WEST TEXAS WILDCATS

Week Ending March 19, 1927

**ANDREWS COUNTY**

| Company, Farm and Location— | Remarks— |
|---|---|
| Calvin & Belt's No. 1 Ratliff & Bedford, C NE Sec. 16, Blk. A-54 | Location. |
| J. S. Cosden's No. 1 Ratliff & Bedford, C SE Sec. 8, Blk. 73, Public School Land | Location. |
| Deep Rock Oil Co.'s No. 1 W. J. Harris, C SE Sec. 12, Blk. A-46, Public School Land | Location. |
| C. B. McKennon's (was Neff et al's) No. 1 J. S. Means, C SE Sec. 12, Blk. A-35, Public School Land | To spud by April 9; location. |
| A. G. Carter & Zweifel's No. 1 Cowden, C SE, Sec. 18, Blk A-52, Public School Land Sur. | Drilling 1,030 ft. |
| Maer & Staniforth's No. 1 W. B. Taylor, C SE Sec. 15, Blk. A-42, Public School Land Sur. | Total depth 1,000 ft.; underreaming 12-in. |
| **BORDEN COUNTY** | |
| Julian Pet. and R. W. Penn's No. 1 A. J. Long, 660 ft. from N and E lines Sec. 10, Blk. 30, Tp. 4-N. | Slight show gas 1.445-50 ft.; hole full salt water 2.295-97 ft.; hole full sulphur water 3.225 ft.; slight show oil 3.503 ft.; hole full sulphur water 3.595-3.618 ft.; hole full sulphur water 3,795 ft.; plugging to abandon at 3,900 ft. |
| Stivers et al's No. 1 Snodgrass | Rig. |
| **CASTRO COUNTY** | |
| Colorado O. & R. Co.'s No. 1 M. Siemons, SW cor. Sec. 78, Blk. M-7, B. S. & F. Sur. | Rig. |
| Gulf Prod. Co.'s No. 1 Clements, SW cor. Sec. 27, Blk. M-10-A, Sealy & Morris Sur. | Total depth 1,505 ft.; underreaming 8-in. to 1,490 ft.; water sand 1,435-50 ft.; total depth 1,725 ft.; underreaming 8-in. 1,705 ft. |
| Mystery Oil Co.'s No. 1 J. I. Crum, SE cor. NE Sec. 333, Blk. M-6, S. K. & K. Sur. | Spudded and shut down. |
| **COCHRAN COUNTY** | |
| J. C. Whicker's No. 1 G. C. Landen, 300 ft. N and 5,800 ft. E SW cor. League 154 Sherman Co. Sch. Ld. | Shut down 1,550 ft. |
| **COKE COUNTY** | |
| Lipan Oil Co.'s No. 1 E. C. Rawlings, CNL Sec. 390, Blk 1-A H & T C Survey | Fishing tools 2,736 ft.; may skid. |
| Lipan Oil Co.'s No. 1 S. M. Conner | Shut down for casing 100 ft. |
| **CONCHO COUNTY** | |
| Harry Adams et al's No. 1 Price, C SW Sec. 78, Blk. 71, Alex Gregg Sur. | Location. |
| Associated Pet. Co.'s No. 1 Sam Waring, SW cor. Jacob Getthardt Sur. No. 2,035 | Fishing bit 2,300 ft. |
| Arkansas Fuel Co.'s No. 1 Hartgrove, SW cor. NW Sec. 49, Blk. 70, H. & T. C. Sur. | 1,000,000 ft. gas 1,100-10 ft.; 4,500,000 ft. gas 1,142-47 ft.; total depth 1,785 ft.; straight-reaming 8-in. |
| The Exploration Co.'s No. 1 Hartgrove, Blk. 340, J. Schouch Sur. | Shut down 1,680 ft. |
| Gene Mays and others' No. 1 Hartgrove, NW SW Sec. 312, Mrs. A. Schmidt Sur., A-1173 | Shut down for casing 1,550 ft.; flowing salt water; making enough gas to burn. |
| Marland Oil Co. & Taylor's No. 1 Sansom, C. NW NW Sec. 128, Blk. 72, T. & N. O. Sur. | Little water 1,375 ft.; shut down 1,650 ft. |
| Swoveland & Lewis' No. 1 Plants & Bacon, C E ¼ Sec. 8, G. C. & S. F. Sur. | Location. |

(Continued on Page 151)

ley, NE cor., Section 21, Block 19, was completed for 350 bbls. on the swab at 2,522-30 feet; No. 2 Tessie Walling, SW cor., Section 19, same block, swabbed 320 bbls. at 2,519-29 feet.

**Lamb County**

E. C. Marrs and others' No. 1 Yellowhouse, in Labor 3, League 697, State Capitol lands, encountered salt water at 4,210-25 feet and was ordered plugged and abandoned.

**Mitchell County**

Magnolia Petroleum Co.'s No. 3 Francis Adams swabbed 65 bbls. after a 320-quart shot at 2,936-3,062 feet. Top of pay was 2,970 feet. The California Co.'s No. 5 Adams, Lease 2, swabbed 80 bbls. after a 280-quart shot at 2,907-3,050 feet, total depth 3,060 feet; No. 18 Morrison, Lease 2, swabbed 45 bbls. after a 300-quart shot at 2,911-3,042 feet. Top of pay was 2,925 feet and total depth at 3,052 feet.

**Howard County**

Magnolia Petroleum Co.'s No. 3 Mary Chalk was shot with 50 quarts at 1,634-60 feet and swabbed 75 bbls.; No. 2 Hyman Chalk made 13 bbls. initially after a 15-quart shot at 1,565-82 feet but water broke in again and the production dropped to 2 bbls. of oil along with 70 bbls. of water.

Marland Oil Co.'s No. 4 Otis Chalk-A swabbed 55 bbls. after a 25-quart shot at 1,560-70 feet, total depth 1,571 feet; No. 1 Otis Chalk-B made 77 bbls. after a 20-quart shot at 1,584-1,604 feet; No. 2 H. R. Clay-A swabbed 125 bbls. after a 38-quart shot at 1,778-97 feet, total depth 1,800 feet.

**Taylor County**

Sanger Oil & Refining Co.'s No. 1 Cox was abandoned as dry at 2,413 feet.

**Upton County**

Bryant and Atlantic Oil Producing Co.'s No. 1 Mrs. M. L. Baker was completed for 30 bbls. after a 100-quart shot at 2,251-2,308 feet. Independent Oil & Gas Co.'s No. 13 Taylor pumped 60 bbls. after a 60-quart shot at 2,048-61 feet, total depth 2,140 feet; No. 73 Taylor pumped 42 bbls. after a 60-quart shot at 2,026-39 feet, total depth 2,040 feet and top of pay 2,027 feet; No. 12 Wooley pumped 125 bbls. at 2,047-2,165 feet, total depth 2,168 feet; No. 14 Wooley pumped 50 bbls. at 2,135-93 feet. Marland Oil Co.'s No. 12 Estep flowed 60 bbls., 3 per cent water and 32 per cent b.s. at 2,385 feet. Sun Oil Co.'s No. 1 Baker swabbed 40 bbls., no water, at 2,253-85 feet. The Texas Company's No. 21 King pumped 138 bbls. at 2,491-94 feet.

**North Central Texas Completions**

**Archer County**

American Refining Co.'s No. 12 Turbeville, made 210 bbls. initial from sand at 1,498-1,513 feet. Barnsdall Oil Co.'s No. 2 Wilson was dry at 1,775 feet. Bridwell & Heydrick's No. 16 Abercrombie & Taylor-A, was also a duster at 1,380 feet; No. 1 Key was a failure at 1,506 feet. L. T. Burns' No. 9 Turbeville-D, found sand at 1,437-63 feet and swabbed 300 bbls.; No. 10 made 145 bbls. initially from sand at 1,438-65 feet; No. 1 Turbeville-E made 350 bbls. initially from sand at 1,437-70 feet. Consolidated Oil Co.'s No. 17 Oldham found sand at 1,327-42 feet and made 30 bbls.

Freeman Hampton Oil Corp.'s No. 21 Ferguson-A had sand at 1,565-57 feet and pumped 5 bbls., total depth 1,567 feet. Golding, Cochran & Cline's No. 14 Prideaux made 20 bbls. at 662-72 feet; No. 16 found sand at 652-68 feet and made 25 bbls. Maer & Staniforth's No. 3 McCarty was dry and abandoned at 1,398 feet. Magnolia Petroleum Co.'s No. 9 Darilek made 11 bbls. at 1,411-17½ feet; No. 32 Lowe had sand at 1,259-64 feet and made 35 bbls. Marland Oil and Consolidated Oil Co.'s No. 3 Ward, made 121½ bbls. initially from sand at 1,014-22 feet; No. 4 found sand at 1,041-51 feet and made 30 bbls.

Phillips & Skinner's No. 2 Lyles was a failure at 1,603 feet. So was Plains Production Co.'s No. 2 Lyles at 1,561 feet. Shappell Oil Co.'s No. 40 Jackson was dry at 1,806 feet. Simms Oil Co. and Burns' No. 8 Turbeville-A, swabbed 200 bbls. at 1,448-70 feet. The Texas Company's No. 2 Lowe made 120 bbls. initially from sand at 1,365-70 feet. Wichita Production Co.'s No. 6 Neal, made 8 bbls. from sand at 1,086-91 feet, total depth 1,093 feet.

**Brown County**

Bowers and others' No. 4 Eads made 35 bbls. initially from sand at 1,309-19 feet. Cranfill & Reynolds' No. 1 Dunn found sand at 1,160-75 feet and pumped 7 bbls. at 1,162-74 feet after 10 and 20-quart shots. Curry and others' No. 3 Newton, made 100 bbls. initially from sand at 1,257-84 feet after a 20-quart shot and is now making 40 bbls. Empire Gas & Fuel Co.'s No. 1 Newton found dry sand at 1,185-92 feet and oil sand at 1,202-15 feet and made 15 bbls. initially after a 10-quart shot. Gibson Oil Corp.'s No. 3 Shore found sand at 1,214-44 feet and after a 40-quart shot made 100 bbls. initially at 1,226-42 feet.

Humble Oil & Refining Co.'s No. 12 Foster made 20 bbls. initially from sand at 1,178-91 feet; No. 3 Fry made 60 bbls. at 1,318-40 feet; No. 15 Hodnett pumped 40 bbls. at 1,202-08 feet; No. 2 Metts found sand at 1,321-28 feet and made 40 bbls. Humphrey Brothers' No. 8 Newton was dry and abandoned at 1,250 feet. Magnolia Petroleum Co.'s No. 1 Metts was also dry at 1,590 feet. So was McGinley and others' No. 1 Newton at 1,356 feet. Quinn and others' No. 3 Pugh was a failure at 1,365 feet. Root and others' No. 1 Pugh was also a duster at 1,358 feet; No. 2 was dry at 1,340 feet.

Rosenfield and others' No. 1 Davis made 30 bbls. at 1,276½-79½ feet. Sawyer and others' No. 7 White had sand at 1,220-28 feet and was shot with 10 quarts at 1,223-27 feet and pumped 10 bbls. Shoup, Jr.'s No. 11 Byler is still drilling and flowing by heads 10 bbls. per hour at 1,266-71 feet; No. 15 made 190 bbls. at 1,260-73 feet, total depth 1,274 feet.

Sinclair Oil & Gas Co.'s No. 16 J. H. Fry made 675 bbls. at 1,289-1,305 feet; No. 17 made 33 bbls. per hour at 1,295-1,307 feet and will drill deeper; No. 18 found sand at 1,301-13 feet and made 20 bbls. per hour and will drill deeper; No. 19 also had sand at 1,314-23 feet and made 18 bbls. per hour and will drill deeper. Sorrells and others' No. 1 White was a failure at 1,365 feet. The Texas Company's No. 1 Byler found sand at 1,271-82 feet and made 45 bbls. after a 5-quart shot at 1,275-82 feet.

The Texas Company's No. 14 Hickman found sand at 1,169-96 feet, good for 37 bbls., total depth 1,199 feet; No. 16 was shot with 3 quarts at 1,237-42 feet and estimated at 5 bbls.; No. 17 Lowe made 528 bbls. initially from sand at 1,257-79 feet. Valley Oil Co.'s No. 5 Teston was shot with 40 quarts at 1,200-15 feet and made 50 bbls. Vaughn & Evans' No. 1 Eads pumped 5 bbls. of oil and 20 bbls. of water at 1,327-29 feet.

Vondren and others' No. 1 Keeler made 2 bbls. of oil and 10 bbls. of water initially from sand at 1,032-36 feet and was plugged back from 1,053 feet to 1,053 feet. Wentz Oil Corp.'s No. 6 Shore found sand at 1,315-30 feet and was shot with 10 quarts at 1,319-25 feet and the estimated production was 100 bbls. Wilson and others' No. 3 Newton was a failure at 1,269 feet. Cranfill & Reynolds' No. 1 Davis was also a duster at 1,289 feet.

**Callahan County**

Humble Oil & Refining Co.'s No. 1 Hickman was dry at 1,261 feet. So was Lawrence and others' No. 1 Cook at 1,004 feet. Milham Corp.'s No. 1 Barr was also a duster at 2,060 feet. Moore & Snebold's No. 1 Boydston was junked and abandoned at 1,500 feet. Moox-Texas Oil Co.'s No. 1 Baum drilled deeper from 1,656 to 1,683 feet. It was a 30-bbl well at 1,650-56 feet and second pay 1,667-83 feet flowed 10 bbls. per hour with tools in the hole.

Prairie Oil & Gas Co.'s No. 1 Baum, drilled deeper from 1,676 to 1,694½ feet, was 5 bbls. after a 12-quart shot at 1,656-76 feet. Second pay 1,678-94½ feet, swabbed and flowed 270 bbls. and will drill deeper; No. 1 Nebb was a failure at 1,500 feet. Shaw and others' No. 1 Crutchfield was dry at 1,248 feet. Wakefield and others' No. 1 Webb found sands at 1,606-33 and 1,658-95 feet and still drilling in sand with show of oil.

**Coleman County**

Gibson & Johnson's No. 1 Casey had sand at 1,493-1,513 feet and a hole full of water. It was dry and abandoned at 1,513 feet. Roth & Faurot's No. 1 Sealy & Smith found top of sand at 2,580 feet with 3,250,000 feet of gas, and was running 5-inch casing. Monroe Production Co.'s No. 1 Brown was dry and abandoned at 2,507 feet.

**Cooke County**

American Refining Co.'s No. 9 Dennis found sand at 1,179-82 feet and made 20 bbls. J. K. Hughes Developing Co.'s No. 1 Embry had sand at 1,200-48 feet and made 35 bbls. Skinner and others' No. 1 Vogel was a duster at 2,350 feet. Stroube & Stroube's No. 2 Koelser made 30 bbls. at 1,268-1,318 feet.

**Eastland County**

Arkansas Fuel Co.'s No. 10 Connellee pumped 20 bbls. at 1,238.56 feet. Eastland Oil Co.'s No. 1 Citizens Water Works was plugged and abandoned at 1,530 feet. Lewis and others' No. 1 Hargus found sand at 1,390-1,415 feet and pumped 18 bbls. after a 60-quart shot at 1,395-1,409 feet. Amyx Oil Co.'s No. 4 Connellee was shot with 30 quarts at 2,994-3,002 feet and made 3,000,000 feet of gas, total depth 3,400 feet. Texas Pacific Coal & Oil Co.'s No. 1 McCall made 175 bbls. initial from lime at 2,900-3,008

(Continued on Page 150)

# Humble Opens Pool in East Texas

## Well in Cherokee County Made 1,080 Bbls. in 14 Hours, Choked Down. Oil Is 40.1 Gravity. Late Field News

A new pool in East Central Texas has been opened by the Humble Oil & Refining Co. in its No. 1 Elliott & Clark, 416 feet from the north line and 1,644 feet from the west line of the Michael Windsor Survey, approximately 14 miles west of Jacksonville, Cherokee County. The Woodbine pay was found at 3,847 feet. The well started at 55 bbls. an hour on Monday. It made 1,080 bbls. the first 14 hours and on Tuesday noon was reported flowing 70 bbls. an hour. It was flowing through a quarter-inch choke and against a back pressure said to be 526 pounds.

The new well is on a 14,000-acre block of leases owned by the Humble company. The oil tests 40.1 degrees gravity, corrected. The block of leases is in the area known as the Terry Lake Salt Dome.

A pipe line will be laid by the Humble company from its Powell terminus a distance of 57 miles west and a little north.

Efforts have been made to find oil in Cherokee County for a long time. Collington and others started operations several years ago. The Humphreys Corp. made a deal with the pioneers and took over the drilling of the Collington block and drilled two or three tests but had bad luck and had to abandon the holes before they were as deep as the company's objective. The territory looked so good to other companies that the Magnolia, Gulf, Humble and other companies all took up large blocks. In addition to the Humble well at this time the Magnolia is drilling below 4,000 feet in No. 1 Sumner on the Brewer Survey, but it is far away from the Humble well, being about 5 miles southeast of the town of Gallitin. Nicolle and wife are drilling on the Hill farm, Dusk Survey, a little east of the town of Alto.

The Gulf Pipe Line Co.'s main line from Kansas and Oklahoma to the Gulf passes close to the east line of Cherokee County and about 30 miles east of the Humble well.

Coming as it does in the midst of a production of crude greater than ever before known the new strike has caused the most intense interest, and reports from the scene of the well on Tuesday were to the effect that many visitors were already present from Shreveport, Fort Worth, Dallas and other large oil centers.

Eight wells were completed in Cherokee County in 1926, some of them deep enough to test the locality, but others of which were abandoned because of hole trouble. The Humble Oil & Refining Co. drilled two other wells on its block, but one was abandoned at about 3,440 feet and the other just below 2,500 feet, so that they signified nothing.

### OKLAHOMA

The Seminole Field produced 309,450 bbls. for the 24 hours ending at 7 o'clock Tuesday morning from 285 wells, an average production per well of 1,086 bbls. per day.

The Turman Oil Co.'s No. 4 Cudjo, NE Cor. SW NW, Section 35-9-6, flowed 800 bbls. the first 24 hours from sand at 4,070-95 feet

The Barnsdall Oil Co.'s No. 1 Ingram, SE cor. NW, Section 1-9-5, produced 252 bbls. the first 18 hours from the Earlsboro sand at 3,494-3,525 feet.

The Atlantic Oil Producing Co. & Independent Oil & Gas Co.'s No. 2 Cudjo, NE cor. NW SE, Section 35-9-6 got Wilcox sand at 4,214 feet and at 4,220 feet was drilling and showing 5 bbls. a day.

The Barnsdall Oil Co.'s No. 2 Jones, NW cor. NE NE, Section 34-9-6 was deepened 6 feet and made 6,132 bbls. the first 24 hours thereafter. It made 5,040 bbls. when deepened 5 feet. The Wilcox sand lies at 4,000 feet, drilled in 82 feet.

The Amerada Petroleum Corp.'s No. 1 Roscoe, NE cor. SW, Section 15-8-6, made 4,105 bbls. in 24 hours from sand at 4,191, drilled to 4,209 feet.

The Gypsy Oil Co.'s No. 1 Seminole, SW cor., Section 5-8-6, got sand at 3,595 feet and the well flowed 25 bbls. every 4 hours.

The Gypsy Oil Co.'s No. 3 Earl, SE cor. NW, Section 16-9-5, Earlsboro sector, got the top of the Wilcox sand at 4,280 feet and at 4,282 feet flowed 600 bbls. in 5 hours, and 2,942 bbls. the first 24 hours.

The Barnsdall Oil Co.'s No. 1 Peck, NE cor. SE SE, Section 10-9-5, in the old Earlsboro Pool, got the Earlsboro sand at 3,525-48 feet. It made 520 bbls. the first 12 hours and then was shut down for lack of storage.

The Phillips Petroleum Co.'s No. 1 Graham, SE cor., Section 9-9-5, got the water shut off and shot sand at 4,285-95 feet with 20 quarts of explosive. The hole filled 3,000 feet with water.

The Sinclair Oil & Gas Co.'s No. 1 Adams, NE cor. SE SE, Section 22-8-6, South Seminole, was drilling Viola lime at 4,285 feet with 1,200 feet of oil in the hole.

### GULF COAST

HOUSTON, Tex., Mar. 22.—Bennett Production Co. and Moody Corp.'s joint No. 5 fee 31 acres, at Barber Hill, Chambers County, 12 miles northeast from Goose Creek, came in at 1,453 feet flowing 1,200 bbls. 26 gravity pipe line oil. Temperature is 73 degrees, which is considered very favorable for a lasting well. Same interests' No. 8 Japhet at Barber Hill is reported spraying oil and gas at 2,450 feet.

The Rycade Petroleum Corp.'s No. 13

(Continued on Page 151)

# Gas Increase in Panhandle Wildcat

## Marland Company Well, North of Canadian River Near Moore County Line, Has 6,000,000 Feet

By C. D. Lockwood
*Staff Correspondent, Texas Panhandle Fields*

Texas Panhandle daily average production responded to the price cuts of recent weeks with a decline of 5,557 bbls. during the past seven-day period, of which Hutchinson County's share was 4,786 bbls. The total daily average output of the district was 124,480 bbls., an average of 122 bbls. per well, the number of producers having increased to 1,021. It is noteworthy that the per well average has dropped 14 bbls. in the past four weeks. Hutchinson County's average per well is now 133 bbls., a decline of 7 bbls. during the week. Wheeler County is next in this respect with 101 bbls. per well. Carson comes third with 85 bbls. and Gray County is fourth with 71.4 bbls.

The past week witnessed a further tightening of the shut-down program which has resulted from the recent crude price cuts and the number of Panhandle operations will probably show somewhat of a decline during the next two months or so as wells now drilling reach the top of the pay and are either shut down on the pay or are drilled in and completed. New locations are dropping off considerably and the numbers of new tests started will not make up for the completions during the next few weeks.

This week's drilling report of the Panhandle shows 26 first reports, 50 additional locations previously staked, 51 rigs building, 28 rigs completed, 33 wells rigging up, 382 drilling operations, 47 wells shut down and 17 completions, a total of 604 operations.

### Interesting Wildcat

Among the interesting wildcats of the week was Marland Oil Co.'s No. 1 Carver in the William Heath Survey, north of the Canadian River near the Moore County line. This test had a small showing of gas in lime at 2,920-25 feet and had 200,000 feet of gas at 2,950-55 feet. At latest report the well was drilling at 3,065 feet and the gas has increased to 6,000,000 feet. It is now at a very interesting depth, being approximately 280 feet above sea level.

In southern Hutchinson County, just north of Carson County's Roxana Pool, Bain and others' No. 1 J. L. Moore, on the west line of Section 125, Block 4, is also worth watching. At latest report it had 1,200 feet of oil in the hole at 2,995-3,065 feet, but had no gas.

In Donley County, the A. T. Drilling Co.'s No. 1 Harrington, SW cor. Section 39, T. T. R. R. Survey, picked up 1,200 feet of water at 3,115-22 feet and then found a small showing of gas at 3,140-60 feet. Total depth is 3,170 feet and the hole is being reamed to set the 6-inch casing below the water.

Another important well is Dominion Oil Co.'s No. 1 Jasper, in Section 23, a little more than a mile west and a little south of the Rock Island Oil Co.'s No. 1 Starnes. Top of lime was found at this location at 2,315 feet, which is 95 feet higher than the depth at which it occurred in the Rock Island test. Total depth at latest report was 2,750 feet, drilling.

The Santa Fe Railroad has announced that it will build a spur from its main line at White Deer to the town of Skelly in Carson County in order to take care of production from the Skelly Oil Co.'s gasoline plant, which is located in Section 86, Block 4.

### Tests Getting Deep

Some of the wildcat tests in the Panhandle are getting pretty deep, several being below 4,000 feet and others nearing that depth. The one nearest the mile-deep level is Big Bend Oil Co.'s No. 1 Ledrick in Section 7, Block 5-A, Roberts County, which drilled through 5 feet of dry sand this week at 4,786 feet and is going ahead at 4,815 feet.

In the same county, Gibson Oil Corp.'s No. 1 Jones, Section 109, Block C, is shut down at 4,010 feet and the chances are even as to whether or not it will be deepened further.

Prairie Oil & Gas Co.'s deep test in Moore County, known as No. 2 Sneed, in Section 26, Block 6-T, has been drilled far enough in the opinion of the owners and will be plugged back and completed as a gasser. It went to 4,300 feet.

In Hemphill County, Hoover and others' No. 1 fee in the J. S. Hood Survey is still going ahead at 4,380 feet. J. E. McKanna's No. 1 Shelton estate, in Hartley County, Section 29, Block 202, is down to 3,440 feet, where it is underreaming 6-inch.

In Sherman County, Phillips Petroleum Co. and Savoy's No. 1 Roach, Section 161, Block 1-C, isn't so shallow, the latest report on it showing a total depth of 3,760 feet, still drilling. Nothing but water has been reported in this hole below 2,915 feet.

Prairie Oil & Gas Co., Shamrock Petroleum Co. and L. R. Hagy's No. 1 Yake, in Hutchinson County, Section 35, Block 47, which is to be a deep test, was last reported at 3,250 feet.

### Texas Panhandle Completions

#### Carson County

Roxana Petroleum Corp.'s No. 2 Bryan-A, NW cor. SW NE, Section 92, Block 4, flowed 100 bbls. after a 120-quart shot in lime and granite wash from 3,205-32 feet; No. 3 Bryan-D, SE cor. SE NW, same section, flowed 20 bbls. as a result of shooting with 180 quarts from 3,155-3,245 feet.

McMan Oil & Gas Co.'s No. 2 E. F. Bryan, SE cor. west 30 acres N half NW, Section 92, flowed 250 bbls. after a 35-quart shot at 3,170-3,228 feet; No. 4 Bryan, NE cor. same 30 acres, flowed 300 bbls. from 3,140-3,226 feet.

The Texas Company's No. 2 M. P. Co. fee, NE cor. NW, Section 91, Block 4, swabbed and flowed 160 bbls. after an 80-quart shot at 3,190-3,210 feet, total depth 3,213 feet. Skelly Oil Co.'s No. 1 Bryan, NE cor. E half SW, Section 92, was flowing 200 bbls. at 3,142-3,220 feet.

#### Gray County

McMan Oil & Gas Co.'s No. 1 Osborne-Pinkley, Section 86, Block 3, swabbed 221 bbls. from granite wash at 3,156-71 feet. The Texas Company's No. 1 Davis, same section, averaged 231 bbls. of oil and 1,000,000 feet of gas coming with the crude over a period of five days. The pay formation is granite wash at 3,082-3,100 feet.

#### Hansford County

F. W. Dillard and associates' No. 1 F. A. Davis, in Section 50, Block 2, was abandoned without getting beyond the spudding depth.

#### Hutchinson County

Buffalo Oil Co.'s No. 2 Smith, Section 14, Block Y, swabbed 50 bbls. after a 200-quart shot at 2,955-3,019 feet. The rig for Burge and others' No. 1 W. R. Harvey was abandoned. This is in Section 40, Block M-21.

Bain and others' No. 1 J. L. Moore in Section 125, Block 4, had 1,200 feet of oil in the hole at 2,995-3,065 feet.

Dixon Creek Oil Co.'s No. 51 Smith, Section 14, Block Y, topped pay at 2,825 feet and after a shot of 250 quarts from 2,846 to 2,911 feet increased from 200 bbls. to 600 bbls.

Donald and others' No. 1 W. B. Haile in Section 24, Block M-21 now pumps 25 bbls., 30 per cent water, following a 70-quart shot at 3,002-52 feet. Total depth of this well was 3,090 feet and it was plugged back to 3,056 feet.

Empire Gas & Fuel Co.'s No. 6 Johnson-A, Section 28, Block 46, swabbed 150 bbls., 15 per cent water, after a 120-quart shot at 2,843-90 feet. No. 8 Johnson-A, same section, was swabbing 200 bbls. after shooting with 100 quarts from 2,647 to 2,789 feet. Midwest Exploration Co.'s No. 1 Johnson-Barnum, Section 69, Block 46, pumped 20 bbls. after a 60-quart shot at 2,675-2,700 feet, total depth 2,723 feet.

Mudge Oil Co.'s No. 1 E. Cockrell, Section 9, Block B-3, was shot with 330 quarts from 2,860 to 2,980 feet, total depth 2,985 feet, and pumped 15 bbls., 20 per cent water, as a result.

Phillips Petroleum Co.'s No. 4 Johnson-Easter, Section 69, Block 46, swabbed 100 bbls. after a 70-quart shot at 2,808-29 feet; No. 4 Whittenburg-Haines in Tract 20 of the Mary Whitley Survey swabbed 100 bbls. from pay at 2,918-35 feet; No 14 Whittenburg-Patton, also in the Mary Whitley Survey, swabbed 100 bbls. after a 60-quart shot at 2,829-49 feet.

Prairie Oil & Gas Co. & Phillips Petroleum Co.'s No. 41 Johnson-A, Section 21, Block Y, pumped 100 bbls. at 2,985-3,010 feet; No. 45 flowed 1,000 bbls., 10 per cent water at 2,947-55 feet; and No. 49 was a 100-bbl. well at 2,927-92 feet. This is in Section 22, Block Y.

Staggers Oil Co.'s No. 1 E. Cockrell in Section 3, Block M-21, which made 25 bbls. initial after a 60-quart shot at 2,955-2,049 feet, was again shot with 220 quarts at the same depth. It bridged and the hole was being cleaned out.

#### Wheeler County

Gibson Oil Co.'s No. 6 Phillips, Section 41, Block 24, flowed 720 bbls. the first 24 hours and 705 bbls. the second day from granite wash pay at 2,285-2,314 feet. This well had 1,000,000 feet of gas at 2,135 feet and increased to 10,000,000 feet. Same company's No. 5 Phillips flowed only 25 bbls. at 2,263-2,308 feet and may be deepened.

Hill, Cook & Riley's No. 1 L. H. Webb (or J. M. Porter) in Section 61, Block 24, was abandoned as dry at 2,610 feet. It found the top of the lime at 2,022 feet. Piney Oil Co.'s No. 1 J. A. Clark, SW cor. NE SW, Section 58, Block 24, picked up 600 feet of salt water at 2,390-95 feet and was plugged.

## WILDCAT OPERATIONS IN PANHANDLE

Week Ending March 19, 1927

**ARMSTRONG COUNTY**

| Company, Well, Farm Name, Section and Block— | Remarks— |
|---|---|
| United Oil & Trust Co.'s No. 1 J. P. Reck, Sec. 162, Blk. 4, H. & G. N. Sur. | Spudded and shut down. |

**BRISCOE COUNTY**

| | |
|---|---|
| C. S. Rice's No. 1 J. C. Anderson, SE cor. NW NW Sec. 23, Blk. B-3, B. S. & F. Sur. | Drilling 1,030 ft. |
| Smith & Baker's No. 1 J. W. Owens, Sec. 11, Blk. GC2 | Location. |

**CARSON COUNTY**

| | |
|---|---|
| Amatex Oil Co.'s No. 1 E. S. Polling, Sec. 22, Blk. 2-Y. | Shut down 1,980 ft. |
| Champlin Ref. Co.'s No. 2 E. F. Bryan, Sec. 92, Blk. 4 | Set 12-in. 600 ft.; drilling 2,800 ft. |
| Delmar Oil Co.'s No. 1 T. D. Lewis, SW cor. Sec. 115, Blk. 4 | First gas 2,640 ft.; 7,000,000 ft. gas 2,800 ft.; drilling 3,025 ft. |
| Empire G. & F. Co.'s No. 1 Burnett-B | Rig |
| Empire G. & F. Co.'s No. 1 Burnett-C | Rigging up. |
| Empire G. & F. Co.'s No. 1 C. R. Garner | Spudding. |
| Empire G. & F. Co.'s No. 1 Lane, NW cor. SW Sec. 72, Blk. 4 | 25,000,000 ft. gas; shut down 2,740 ft. |
| Empire G. & F. Co.'s No. 2 M. P. Co. fee-A, NE cor. SW Sec. 91, Blk. 4 | Drilling 2,110 ft. |
| Empire G. & F. Co.'s No. 3 M. P. Co. fee-A, SE cor. SW Sec. 91, Blk. 4 | Drilling 425 ft. |
| Gulf Prod. Co.'s No. 1 Noel, SE cor. SW Sec. 198, Blk. 3 | Total depth 2,520 ft.; cementing 8-in. |
| J. K. Hughes Developing Co.'s No. 1 F. E. Percival, NE cor. E ½ NW Sec. 199, Blk. 3 | Drilling 2,575 ft. |
| J. K. Hughes Developing Co.'s No. 2 F. E. Percival, NW cor. E ½ NW Sec. 199, Blk. 3 | Drilling 1,000 ft. |
| Marland Oil Co.'s No. 1 Burnett-J, C NE NE Sec. 121, Blk. 5 | Fishing 990 ft. |
| Marland Oil Co.'s No. 2 J. W. McConnell | Spudding. |
| Marland Oil Co.'s No. 1 C. R. Garner, NE cor. Sec. 93, Blk. 4 | Drilling 2,775 ft. |
| Marland Oil Co.'s No. 2 C. R. Garner | Spudding. |
| Marston Oil Co.'s No. 1 E. F. Bryan, Sec. 92, Blk. 4 | First gas 2,670 ft.; drilling 3,100 ft. |
| Marston Oil Co.'s No. 1 J. L. Noel | Shut down 800 ft. |
| McMan O. & G. Co.'s No. 1 J. L. Noel, SW cor. SE SE Sec. 198, Blk. 3 | Standardized 2,605 ft.; rigging up. |
| McMan O. & G. Co.'s No. 1 F. E. Percival, NE cor. W ½ NE Sec. 199, Blk. 3 | Standardized 2,631 ft.; rigging up. |
| McMan O. & G. Co.'s No. 2 F. E. Percival, NW cor. W ½ NE Sec. 199, Blk. 3 | Shut down 2,608 ft. |
| Navajo Oil Co.'s No. 1 E. S. Polling, Sec. 22, Blk. 2-Y | Drilling 1,675 ft. |
| Nunn & McAuley's No. 2 Bryan, SE cor. NW SW Sec. 107, Blk. 4 | 100 bbls. 3,205-12 ft.; cleaning out. |
| Osborne et al's No. 1 F. E. Percival, NW cor. E ½ NE Sec. 199, Blk. 3 | Drilling 1,610 ft. |
| J. T. Parks' No. 1 J. W. McConnell, Sec. 67, Blk. 4 | Drilling 550 ft. |
| J. T. Parks' No. 2 J. L. Noel, SW cor. W ½ SE Sec. 198, Blk. 3 | Drilling 2,980 ft. |
| Prairie O. & G. Co.'s No. 1 Bryan, Sec. 107, Blk. 4 | First gas 2,805 ft.; 15,000,000 ft. gas 2,980 ft.; show oil 3,050 ft.; salt water 3,215-35 ft.; shut down. |
| Prairie O. & G. Co.'s No. 2 Bryan, Sec. 107, Blk. 4 | Shut down 402 ft. |
| Prairie O. & G. Co.'s (was Marland Oil Co.'s) No. 1 McConnell, Sec. 67, Blk. 4 | Drilling 430 ft. |
| Prairie O. & G. Co.'s (was Marland Oil Co.'s) No. 2 McConnell, Sec. 67, Blk. 4 | Spudding. |

(Continued on Page 152)

### DAILY AVERAGE PRODUCTION OF THE AMARILLO DISTRICT

Week Ending March 19, 1927

| Company— | Wells | Daily Average Last Week | Daily Average This Week |
|---|---|---|---|
| Alaska Pet. Co. | 1 | 35 | 30 |
| Amerada Pet. Corp. | 9 | 751 | 750 |
| American Ref. Co. | 6 | 175 | 180 |
| Apex Oil Co. | 2 | 675 | 705 |
| Badger Oil Co. | 2 | 70 | 30 |
| Barnsdall Oil Co. | 2 | 49 | 50 |
| R. G. Barnum | 1 | 10 | 10 |
| Black Diamond Oil Co. | 1 | 15 | 10 |
| Block Y Pet. Co. | 1 | 0 | 0 |
| Brookins & Kistler | 2 | 250 | 225 |
| Buffalo Oil Co. | 1 | 30 | 15 |
| Canadian River Oil Co. | 6 | 435 | 385 |
| Center Dome Oil Co. | 2 | 40 | 30 |
| Centerfield Oil Co. | 1 | 5 | 5 |
| Coble-Whittenberg | 4 | 412 | 370 |
| Continental Oil Co. | 1 | 8 | 5 |
| Currie Brothers and J. R. Phillips | 3 | 690 | 725 |
| Cockrell & McElroy | 4 | 350 | 405 |
| Delmar Oil Co. | 2 | 56 | 45 |
| Derby Oil Co. | 8 | 4,646 | 2,750 |
| Devonian Oil Co. | 8 | 770 | 550 |
| Dixon Creek Oil Co. | 39 | 7,005 | 7,500 |

(Continued on Page 156)

[DUNN TOOLAGRAM]

OIL WELL DUNN TOOLS

# Where safety is vital the Dunn Super-Safety Elevator is imperative.....

The Dunn Super-Safety Elevator (Automatic Link Release, Side-Door Type) being used on the United North & South Oil Company's Kelly Well No. 1, in the Luling (Texas) field, - - - The Deepest Well in the Mid-Continent - - - depth 6,610 feet, January 20th, 1927. They are headed for 8,000 feet and the Dunn Elevators are O. K. for that, and plenty more.

This automatic link release elevator is ideal for setting casing and handling rotary drill pipe. The use of two elevators, instead of one elevator and a set of slips, eliminates all possibility of "bottlenecking," crushing, crystallization and other damage to pipe that usually occurs when slips are used.

*These "Super-Safety" Elevators are made in the regular Side-Door type, and also in our own distinctive Double-Door "Flyer" type, both standard and extra heavy weights.*

**DUNN**
**MANUFACTURING COMPANY**
**OXNARD, CALIFORNIA**

*Mid-Continent Branch Warehouse*
215 East Archer St. Tulsa, Oklahoma

*Export Sales Office*
150 Broadway, New York City

# Earlsboro Area Limited to the West

## South Seminole May Have Greater Influence on Production. Deepest Showing in Southern Oklahoma

By J. L. Dwyer
*Staff Correspondent, Oklahoma Fields*

The performance of the Greater Seminole area, the discovery of the deepest showing ever found in southern Oklahoma, and another showing for Logan County were the chief high spots in last week's news.

Greater Seminole continues just as puzzling as ever, and the main pool in Township 9-6 is producing 217,111 bbls. Its peak was 256,000 bbls., and at this time the only ray of hope for the general Seminole situation is the decreased production of 9-6 and the apparently limited area of the Earlsboro region. There is approximately 30,000 bbls. daily production shut in in 9-6 and some of the older leases in the field are slipping. This latter performance is to be expected, as they have already produced more oil than was anticipated. Last week witnessed another important event at Seminole—the first treating plant was constructed in the field. There has been some water in the field, but it has been free water, and has not cut the oil. The past week saw one well making a high percentage of water which affected the oil and was responsible for the treating plant. The water situation has not become general and the peculiar feature of the well is that it was high on the structure, according to measurements.

The Earlsboro sector of the field offers great possibilities for study. To the west of the field, the Gypsy Oil Co.'s No. 1 Earl, NE cor. NW, Section 16-9-5, has 2,500 feet of water in the hole. This is a half mile west of the discovery well, and a quarter mile west of the present limits of production. It apparently cuts off the field from extensions to the west. Previous events have caused the prospects of territory to the east and the north to look very poor, and at present, the only region which looks prospective is to the south of the present production. The Gypsy-Amerada's No. 3 Earl, SE cor. NW, Section 16-9-5, a half mile southwest of the discovery well is a good well and is making 140 bbls. hourly from the Wilcox sand found at 4,281-82 feet. The unusual features of these two wells are that No. 3 Earl, a good producing well, was found 45 feet low on the structure, while No. 1 Earl, which is evidently a failure was found 90 feet high.

### South Seminole

It seems possible at this time that South Seminole, as the 8-6 area is being termed, will have a greater influence upon the production of the entire region than Earlsboro, for wells in that sector cover a much greater spread.

In the South Seminole territory, the Amerada Petroleum Corp.'s No. 1 Rascoe, NE cor. SW, Section 15-8-6, is flowing 190 bbls. hourly from the Wilcox, found at 4,191-4,209 feet. This well is a direct offset to the Indian Territory Illuminating Oil Co.'s No. 1 Livingston, in Section 15-8-6, which has been holding steady at 6,500 bbls. daily. There should be several additional completions in South Seminole this month and their results will afford a much better idea of the future of the field.

In Seminole, the Gypsy Oil Co.'s No. 3 Butler, NW cor. NW, Section 35-9-6, is an unsual well. It has the Wilcox sand at 4,165-74 feet with a hole full of water which swabbed down and the well was shot with 10 quarts and then made 1,250 bbls. in 15 hours.

Roxana Petroleum Corp. has a small well in the Sylvan shale in No. 1 Taylor, SE cor. NE, Section 16-8-6, which is flowing 55 bbls. at a depth of 4,035 feet. Mid-Kansas Oil & Gas Co.'s No. 1 Jacksey, NE cor. SE NE, Section 3-8-6, is swabbing 600 bbls. from the Wilcox sand at 4,242-52 feet.

### Logan County Showing

Another showing in Logan County causes additional interest in that much-wildcatted county. J. P. Bailey's No. 1 Lovell, SW cor. NW, Section 9-18-4w, had a showing of oil at 4,003 feet. T. B. Slick's well in Section 28-17-1, was reported drilled into water at a depth of 4,685 feet.

The deepest showing ever found in southern Oklahoma was found in E. M. Boring and others' No. 1 Laten, NE cor. SW, Section 10-6s-3w, where the oil appeared through a hole full of water at a depth of 4,534 feet. The well is being tested out.

The list of production for Seminole by leases and companies, giving the daily average production for the week ending March 18, follows:

| Company and Lease— | Wells | Prod. |
|---|---|---|
| Amerada: | | |
| Anderson | 2 | 7,001 |
| Fixico | 4 | 5,777 |
| Killingsworth | 4 | 2,606 |
| Rentle | 4 | 3,987 |
| Total | | 19,371 |
| Atlantic Oil Prod. Co.: | | |
| N. Cudjo | 3 | 4,440 |
| *J. Cudjo | 2 | 440 |
| Total | | 4,880 |
| *Half Independent. | | |
| Barnsdall: | | |
| Carter | 9 | 10,303 |
| Jones | 2 | 10,102 |
| Total | | 20,405 |
| Carter: | | |
| B. Carter | 2 | 180 |
| J. Carter | 4 | 115 |
| F. Carter | 4 | 1,995 |
| R. Cudjo | 3 | 8,075 |
| W. Cudjo | 1 | 115 |
| Davis | 4 | 6,545 |
| Frazier | 2 | 4,005 |
| Grisso | 6 | 6,340 |
| Kiker | 1 | Off |
| Knappenberger | 4 | 2,215 |
| M. Killingsworth | 5 | 2,680 |
| G. Killingsworth | 3 | 4,340 |
| Lukes | 2 | 3,000 |
| Stewart | 2 | 1,750 |
| Scott | 1 | 115 |
| Strothers | 1 | 3,740 |
| Walker | 1 | 6,000 |
| Total | | 51,210 |
| Empire: | | |
| Lacey | 1 | 6,995 |
| Wilson | 1 | 1,976 |
| Total | | 8,971 |
| Gypsy Oil Co.: | | |
| Butler | 3 | 1,657 |
| Carter | 8 | 2,307 |
| Cudjo | 1 | 1,645 |
| Fixico | 5 | 232 |
| Harjo | 1 | 1,257 |
| *State land | 3 | 19,192 |
| Wolfe | 5 | 6,635 |
| Total | | 32,925 |
| Independent Oil & Gas: | | |
| P. Fixico | 2 | 1,429 |
| Independent-Garland: | | |
| T. Fixico | 8 | 2,896 |
| Independent-Interocean: | | |
| Jones | 4 | 2,624 |
| Indian Terr. Illum. Oil Co.: | | |
| Bowlegs | 7 | 5,380 |
| Davis | 1 | 3,303 |
| Goodin | 3 | 1,433 |
| Harjo | 4 | 1,845 |
| James | 5 | 1,809 |
| Livingston | 1 | 5,913 |
| Reed | 3 | 48 |
| Total | | 19,731 |
| Kingwood: | | |
| Johnson | 4 | 5,060 |
| Magnolia Pet. Co.: | | |
| Franks | 2 | 3,502 |
| Mid-Cont. Pet. Corp.: | | |
| Grayson | 3 | 5,840 |
| Rentle | 7 | 4,565 |
| Tayeche | 6 | 2,680 |
| Total | | 13,025 |
| Mid-Kansas Oil & Gas Co.: | | |
| Cully | 1 | 503 |
| Johnson | 1 | 700 |
| Total | | 1,203 |
| Philmack-McCulloch: | | |
| Butler | 1 | 2,125 |
| Phillips Pet. Co.: | | |
| Strothers | 1 | Off |
| Prairie Oil & Gas Co.: | | |
| Carter | 1 | 70 |
| Gross | 5 | 345 |
| Kinkade | 6 | 7,890 |
| Spencer | 1 | 55 |
| Strothers | 5 | 12,600 |
| Total | | 20,960 |
| Pure Oil Co.: | | |
| Strothers | 16 | 25,708 |
| Roxana Pet. Corp.: | | |
| Harber | 1 | 705 |
| Lashley | 1 | 51 |
| Taylor | 1 | 66 |
| Total | | 822 |
| Searight et al: | | |
| Youngblood | 2 | 1,500 |
| Sinclair Oil & Gas Co.: | | |
| Carter | 2 | 35 |
| Cudjo A | 6 | 7,655 |
| Cudjo B | 3 | 8,000 |
| *Fixico | 2 | 2,625 |
| Polly | 1 | 1,095 |
| Total | | 19,410 |
| *Half Transcontinental. | | |
| T. B. Slick: | | |
| Cudjo | 1 | 759 |
| Franks | 6 | 12,806 |
| Giblet | 1 | 1,043 |
| Total | | 14,608 |
| Superior Oil Co.: | | |
| Cudjo | 4 | 5,938 |
| The Texas Company: | | |
| Mayhue | 1 | 410 |
| Tidal-Osage Oil Co.: | | |
| Carter | 4 | 2,265 |
| Fixico | 5 | 7,440 |
| Harjo | 5 | 660 |
| Mahardy | 4 | 1,075 |
| Tayeche | 2 | 2,750 |
| Total | | 14,190 |
| Turman Oil Co.: | | |
| Cudjo | 3 | 187 |
| Grisso | 1 | 2,876 |
| Total | | 3,063 |
| Twin State Oil Co.: | | |
| Jennings | 1 | 265 |
| Earlsboro shallow | 19 | 3,500 |
| Grand total | 278 | 303,314 |

**By Districts**

| | |
|---|---|
| 9-6 | 217,111 |
| 10-6 | 30,650 |
| 9-5 | 33,776 |
| 8-6 | 21,777 |
| Tota | 303,314 |

### Caddo County

Gorton Trust Co. made location for No. 8 Wade, NW cor. NE SW, Section 2-5-9w. No. 7 Wade, NW cor. SE SW, Section 2-5-9w, cemented 8-inch casing at 1,990 feet and drilled to 2,400 feet where it is pumping 180 bbls.

### Cleveland County

Cromwell & Wirt Franklin's rotary rig is being moved in for No. 1 Donovan, C SW, Section 22-10-2w.

### Comanche County

Couch & Cherry made location for No. 1 Watson, SE cor. NW NE, Section 24-2-10w. Magnolia Petroleum Co.'s No. 1 Jennings, NW cor. NE, Section 10-3-10w, has been abandoned at 4,405 feet.

### Carter County

Magnolia Petroleum Co. has the rig up for No. 5 W. Hardin, SW cor. NW SW, Section 19-1s-3w. The rotary ma-

# FOURTEEN FAILURES IN MEXICO OUT OF 19 COMPLETIONS REPORTED

By George Blanc'one
*Staff Correspondent, Mexican Fields*

TAMPICO, Mexico, Mar. 18. — Some 19 wells can be credited as completions in Mexican fields. Of this number five finished in the pay completion column, the remainder being failures. The best well of the lot is Mexican Eagle Oil Co.'s No. 45 Cerro Veijo, which is rated 10,000 bbls. at 2,108 feet. This Cerro Veijo is in the south fields, and is owned jointly by the Mexican Eagle and Huasteca Petroleum Co., although the former operates the field. It is the best completion there in some time.

The surprise well of the week was Cosmos Oil Co.'s No. 133, Lot G, Corcovado, in the northern fields, and is reported with a flush head of 1,000 bbls. Its depth is very shallow, being around 1,253 feet, a San Felipe test. Corcovado, while it has had some fair wells, never lived up to its first expectations and was the graveyard of a good many hopes of some three years' ago. But every now and then, as the drill occasionally proves, high spots develop, especially in the northern fields.

The other pay completions are listed as follows: New England Fuel Oil Co. (subsidiary of the Magnolia Petroleum Co.) has a 500-bbl. well in its No. 5 Caballero, in the heart of the old Panuco Field, which was finished at 1,640 feet. In the south fields, Mexican Eagle Oil Co. has only 40 bbls. from its No. 30, Lot 226 Amatlan, finished at 2,226 feet; and down in Furbero it has 20 bbls. in its No. 43, finished at 2,375 feet.

### February Completions

February was the worst month known in Mexican fields for a long while. Say 45 wells were completed, of which only 14 were producers, and none was notable. It might be remarked that as the month was closing Mexican Sinclair Petroleum Corp. was credited in these dispatches with finishing its No. 6 A San Isidro, in the south fields, at 2,589 feet (sub-sea level 2,374) for 5,000 bbls. The drill stopped in the San Felipe formation, but as the flow developed into a head flow, the test will be deepened, hence it is not included in these figures for February completions. It is quite shallow for that section. Cortez Oil Corp., which has for a long time been held up in its No. 13, Lot 357 Aguada, south fields, at 3,758 feet (shale), owing to collapsed casing, is calling the hole junked and is skidding over. In the state of Tamaulipas, northwest of Tampico, and a distinct wildcat, Craig and others' finished No. 1 Gallinas (something west of Columbus station) at 2,415 feet in salt water. So ended any special performances as February closed.

Of the February figures consider: Forty wells were finished in the north fields of which twelve were producers; five were finished down south, of which two were producers. The production (potential head) was: North fields, 3,690 bbls., with the south fields trailing with 3,000 bbls., a total of 6,690 bbls.

### Northern Failures

The failures in the northern fields follow: International Petroleum Co.'s Nos. 293 to 296, inclusive, in the Cacalilao sector are dry holes at 2,250 to 2,350 feet. Mexican Sinclair Petroleum Corp.'s No. 151 Cacalilao is dry at 2,305 feet. New England Fuel Oil Co.'s No. 27-A La Polla is dry at 2,087 feet. Territorial Oil Co.'s No. 42 Salvasuchi (Panuco) drilled into a considerable volume of salt water at 1,820 feet. American International Fuel Co.'s No. 57 Los Esteros (Tamaulipas) drilled into 10,000 bbls. of salt water at 1,993 feet. Corona Petroleum Co.'s No. 33, Lot 6 Corcovado, drilled into salt water at 2,402 feet; and to change the saline tempo the Marland interests in Limon finished three dry holes from 2,490 to 2,505 feet.

In the south fields, Mexican Gulf Oil

(Continued on Page 130)

Harper Leech, "business-economics" writer for The Chicago Tribune, gives some interesting figures showing the increased productivity of labor in various industries during the past ten years

In the cement industry, output per man has increased 58%, in steel 58%, in flour milling 39%, in packing 27%, in shoe manufacturing 16% and in oil refining 77%

One big reason for this increased efficiency in the refining industry has been the development of the cracking process

And the greatest single factor in the development of cracking has been the perfection and world-wide use of the Dubbs Cracking Process

Universal Oil Products Company
Owner of the Dubbs Process
310 South Michigan Ave
Chicago, Illinois

chine is being rigged up for No. 8 J. J. Hardin, NE cor. NW, Section 19-1s-3w. Carter Oil Co.'s No. 2 Pierce, SW cor., Section 8-2s-2w, is drilling deeper at 1,990 feet. Magnolia Petroleum Co. is putting up the rig for No. 1 Morris, NW cor. NE SE, Section 21-2s-3w. Max Westheimer's No. 1 Simpson, NW cor. SW, Section 26-2s-2w, was abandoned at 1,205 feet.

**Creek County**

The Texas Company has the rig up for No. 1 Abraham, NW cor., Section 29-14-9. C. G. Tibbens has a machine at the location for No. 6 R. Lucas, NW cor. NE SE, Section 31-15-9. Carter Oil Co. has built the rig for No. 2 Harris, SW cor NE, Section 12-17-10. Roxana Petroleum Corp. has the rig on the ground for No. 1 Yarhola, SW cor. NW NW, Section 11-17-9. Haddock and others made location for No. 1 Perryman, NW cor. NE SE, Section 8-17-9. Farquean and others have built the rig for No. 1 Townsite, Lot 35, Block 26, in the Oakhurst Pool. Curtis Oil Co. has the rig up for No. 1 Gray, SW cor. NW, Section 21-18-9. C. G. Tibbens' No. 1 Factor, NE cor., Section 29-15-8, is drilling at 1,040 feet. Burk-Greis Oil Co. has the rig up for No. 2 Strip, SE cor. NW SW, Section 16-17-8. A. A. Bailey & Barnsdall Oil Co. have built the rig for No. 1 Crosbie, NE cor. SE, Section 23-18-8. Sinclair Oil & Gas Co. is repairing the rig to drill No. 2 Long, SW cor., Section 9-18-7, deeper from the depth of 2,350 feet.

J. B. Grieves' No. 1-A Asbury, SE cor. SW SW, Section 1-19-18, is dry and abandoned at 2,919 feet. Shaffer Oil & Refining Co.'s No. 3 Morrison, NW cor. SW SW, Section 16-17-8, was given a shot of 20 quarts in sand 3,454-90 feet and made 290 bbls. T. C. M. Oil Co.'s No. 1 Peters, NE cor. SW NW, Section 23-16-8, has been abandoned at 490 feet. C. G. Tibbens' No. 4 L. Herrod, NE cor. NW SE, Section 25-15-8, is a dry hole at 2,939 feet. Cumberland Oil Co.'s No. 3 Meyer, CWL SW SW, Section 18-17-11, made a 20-bbl. well in the Red Fork sand 1,853-72 feet after a shot of 90 quarts. No. 1 Berryhill, CEL NW SE, Section 18-17-11, had water in the Wilcox sand 2,858-98 feet and is abandoned. Kurell Oil & Gas Co.'s No. 7 Davis, SW cor. NW SW SW, Section 11-17-11, is dry in the Glenn sand 1,647-1,700 feet. Skelly Oil Co.'s No. 3 Yellowhead, NE cor. NW SW, Section 32-17-10, found the Dutcher sand 2,704-11 feet and is good for 250 bbls. J. H. Wright's No. 13 C. Tahkaney, NE cor. NW SE, Section 24-17-10, is a 25-bbl. well in the Dutcher sand 2,400-24 feet. The Prairie Oil & Gas Co.'s No. 41 Rector, NE cor. SW NE SE, Section 6-18-7, was completed for 100 bbls. O. M. Irelan's No. 2 Unallotted, NE cor. SW, Section 11-17-10, had a hole full of water in the Red Fork sand 1,973-90 feet and abandoned after drilling to 2,077 feet. Continental Oil Co.'s No. 1 Charcotetana, NE cor. NW SE, Section 9-17-10, is dry in the Wilcox sand 2,925-75 feet. McCulloch Oil Co.'s No. 1 L. Johns, NW cor. SE, Section 4-17-10, an old well deepened, has been abandoned after drilling through the Wilcox sand and into the Turkey Mountain sand 3,295-3,365 feet. The Texas Company's No. 1 Johnson, NW cor. NE SW, Section 2-17-10, is a Wilcox sand dry hole at the total depth of 3,280 feet. In the Oakhurst Townsite Pool, Sunray Oil Corp. has abandoned the rig for No. 1, Lot 22, Block 16, Section 6-18-12. No. 1, Lot 17, Block 24 is dry in the Turkey Mountain sand 2,253-77 feet. Savoy Oil Co.'s No. 1, Lot 46, Block 9, Section 6-18-12, is dry in the Turkey Mountain sand 2,260-70 feet. Kolb and other's No. 1, Lot 23, Block 24, Section 6-18-12, is a dry hole in the Turkey Mountain sand 2,229-82 feet.

William & Wood's No. 1-A Sizemore, NW cor. NE, Section 5-18-12, has been abandoned after drilling through the Wilcox sand 2,228-75 feet and also finding a hole full of water in the Turkey Mountain sand 2,350-56 feet. C. L. McMahon's No. 1 Gooden, CWL SW NE, Section 31-19-9, is a dry hole in the Turkey Mountain sand 3,254-96 feet. Selby Oil & Gas Co.'s No. 1 D. Fife, NE cor., Section 28-18-11, and old well deepened, has been abandoned in the Turkey Mountain sand 2,576-84. feet.

**Garvin County**

Magnolia Petroleum Co. is building the rig for No. 27 Cowan, SW cor. NE, Section 15-1-3w. Garland Oil Co. has made location for No. 1 Strickland, SW cor. NW SW, Section 10-4-3.

**Grady County**

Carter Oil Co.'s No. 3 V. Miller, SE cor. SW SW, Section 22-3-5w, is being deepened, now swabbing 82 bbls. from sand 1,823-32 feet. No. 1 White, NE cor. SE SE, Section 21-3-5w, is cleaning out at 1,684 feet to deepen. No. 1 T. Horton, NE cor. NW SW, Section 8-3-5w, an old well deepened, is on top of sand at 1,850 feet showing oil. Empire Gas & Fuel Co.'s No. 1 Glasco, SE cor. SW SW, Section 25-4-6w, has the timbers on the ground.

Carter Oil Co.'s No. 1 Dolen, NW cor. SE NW, Section 16-3-5w, in the Carter-Knox district is making 25 bbls. from sand 1,770-71 feet. No. 1 Tucker, NE cor. SE, Section 21-4-6w, is dry at 3,016 feet. Watchorn Oil & Gas Co.'s No. 3 Pettitt, NW cor. SE, Section 11-4-8w, is making 22,000,000 feet of gas from sand 2,129-2,429 feet.

**Hughes County**

Winona Oil Co.'s No. 1 Pigeon, NW cor. SW SW, Section 25-9-9, has been abandoned at 3,337 feet with a hole full of water.

**Jefferson County**

Magnolia Petroleum Co. has the rig up for No. 1 Ryan, SE cor. NW SE, Section 23-6s-6w.

**Muskogee County**

D. C. Lampton has the machine at the location for No. 1 Carolina, NE cor NW SW, Section 9-15-18. W. R. Sommerville's No. 1 Monday, NW cor. SE NE, Section 17-15-17, made 150 bbls. the first 24 hours from sand 1,440-41 feet. Jolly-Ogg Oil Co.'s No. 5 Meagher, SE cor. SW NE, Section 32-15-18, has a hole full of water in sand 1,832-85 feet.

**Kay County**

Carter Oil Co. made location for No. 1 Sutton, C SW NE, Section 30-25-1w, in the Tonkawa Field. The rig is being moved in for No. 1 W. M. Sutton, NW cor. SE, Section 30-25-1w. Mid-Kansas Oil Co. has abandoned the location for No. 1 Day, NE cor. NW SE, Section 20-29-1w, in the North Braman Pool. Carter Oil Co.'s No. 3 Shimp, NE cor. SE SW, Section 17-29-1e, was completed for 212 bbls. in sand 2,310-27 feet. Otstot and others' No. 1 Slocum, NW cor., Section 16-27-1w, in the Blackwell Field, was deepened 8 feet to total depth of 3,459 feet in sandy lime and is producing 4,000,000 feet of gas. Marland Oil Co.'s No. 1 Van Winkle, SE cor. SW, Section 30-27-2, a location has been abandoned. The Prairie Oil & Gas Co.'s No. 4 Smith "A" SE cor., Section 1-26-2w, is making 757 bbls. from sand 3,570-3,610 feet.

**Lincoln County**

Amerada Petroleum Corp. & Madden and Madden's No. 1 Hemming, NW cor. SW SE, Section 34-15-6, has been abandoned at 4,478 feet.

**McClain County**

Crown Oil Co. made location for No. 1 McCullough, SW cor. NW, Section 26-5-3.

**Murray County**

Revels & Magee's rig is being erected for No. 1 M. Wolf, NW cor., Section 17-1-2.

**Noble County**

Bu-Vi-Bar Petroleum Co. is putting up the rig for No. 1 Sawyer, NE cor. NW, Section 12-21-3 to deepen from 3,509½ feet.

**Osage County**

L. C. Duffield made location for No. 1, NW cor. SW, Section 35-29-10. Gypsy Oil Co. has built the rig for No. 4 SE cor. NE SE, Section 28-27-6. The rig has also been erected for No. 5 NE cor. SE, Section 28-27-6. Phillips Petroleum Co. made location for No. 1 NW cor. SE, Section 35-26-11. The Texas Company's No. 5 NW cor. SW SW, Section 29-25-8, is rigging up. C. B. Peters is building the rig for No. 1 SW cor. SE NE, Section 18-24-8. Edgington & Mullendore made location for No. 8 NE cor. NW NW, Section 3-22-9. W. J. Knupp made loca-

(Continued on Page 103)

# MAY HAVE TAPPED WILCOX SAND NORTH OF WINFIELD, KANSAS

By J. L. Dwyer
*Staff Correspondent, Kansas Fields*

The Wilcox sand may have been tapped in the State Pool north of the city of Winfield, in Cowley County, where the Independent Oil & Gas Co. and others have a higher gravity oil in No. 1 Cochran, SE cor. NE NW, Section 15-32-4. A sand was found at a depth of 3,468 feet and drilled 2 feet, when the hole filled up with 42 gravity oil. This is the depth of the siliceous lime in this area, but the oil previously found has been much lower in gravity. The well is now flowing 30 bbls. daily, and the casing is being pulled preparatory to drilling in.

Northeast of the Trees Pool, the Trees Oil Co.'s No. 1 Dickinson, SW cor. NE, Section 30-30-4, is swabbing 5 bbls. an hour from sand 2,100-07 feet, and the well will be put on the pump.

The Churchill Pool, in Sumner County, is making about 18,000 bbls. daily and drilling continues at a normal rate.

McPherson County has five new wildcat wells starting, most of them on good geology and part of them on core drill information; Reeves Brothers and others' No. 2 Anderson, SW cor. SE SW, Section 29-18-2w, has 1,000,000 feet of gas coming from sand 2,934-35 feet and is fishing.

What may become an important area, is the region around the Roxana Petroleum Corp.'s No. 1 Carlson, SW cor. SW, Section 21-30-3, is Cowley County. This well was drilled along the famous Granite Ridge which has been responsible for the Churchill Pool. It is thought that the sand encountered is the Stapleton sand which has produced with good results in other parts of the State. Pay was found 2,961-64 feet, and the hole filled up 400 feet with oil very quickly. The well is being cleaned out before drilling will be resumed.

Miami County is receiving a play on account of the shallow sands formerly found in this section. There are about 20 wells drilling in the region of Townships 15-24, 16-24 and 16-23, 15-23.

**Barton County**

Hagnes and others' No. 1 Taul, NW cor. Section 31-18-12, is being rigged up to deepen from the old total depth of 1,865 feet.

**Butler County**

Rogers and others' No. 12 Drum Bitler, NW cor. NE SE, Section 20-26-8, was completed for 140 bbls. in sand at 2,645-2,705 feet after a shot of 80 quarts. Phillips Petroleum Co.'s No. 1 Oldsbury, SE cor. NE NE, Section 17-27-6, in the Leon-Weaver Pool, made 40 bbls. after it was

(Continued on Page 100)

# ACTIVE DEVELOPMENTS PLANNED IN SAN JUAN AND ARIZONA

By Special Correspondent

FARMINGTON, N. Mex., Mar. 18.—The Indian reservation oil-leasing bill was signed by the President on March 3 and is now a law. This measure provides for the granting of oil and gas permits according to the General Leasing Act of 1920 on lands added by executive order to Indian reservations, subject to regulations made by the Secretary of the Interior.

Indians are to receive the entire amount of royalties due them from leases, and the states are given permission to levy a gross production tax on them. This will affect the lands in San Juan County, New Mexico, and also in Arizona, known as the "Proclamation Strip" of the Navajo reservation. Local applicants for permits on the Proclamation Strip are already planning active development as soon as, and in the event their permits are issued.

A steel rig is in transit for No. 2 Pine of the Union Oil & Mining Co. to replace the drilling machine recently destroyed by fire. The well is flowing a small amount of oil through the many obstructions in the hole. The well is down 2,950 feet, at which depth an oil sand was encountered.

A. M. Edwards, trustee, drilling the No. 1 Jackson in the Bloomfield district, has picked up a good oil showing in a sand found at 740 feet. A pumping test will be made.

In the Continental, at the Santa Fe Co.'s No. 17 on the Rattlesnake structure, Section 2-29-19, which is a deep test, the crew is trying to sidetrack a lost string of pipe.

In this company's No. 23, in Section 12-29-19, which is drilling at 960 feet, an oil showing was picked up at 845 feet, but this has been cased off in order to test the lower sands.

The Continental Oil Co.'s No. 8-A, in Section 3-27-17, on the Table Mesa structure, is reported a producer at 1,420 feet.

In McKinley County, with exception of two locations, there has been little new development in the Midwest area. Drilling has been resumed on the Midwest Refining Co.'s discovery well, which is below 1,600 feet. The drilling of this well is being watched closely by geologists and major company scouts.

**San Juan County Drilling**

Mid-Continent Oil Co.'s No. 1 Hare, NE NW Section 22-9n-11w, drilling at 185 feet; Mansfield's No. 1 Emery, Section 23-30n-9w, drilling at 300 feet; Congress Oil Corp.'s No. 1 Garland, NE SE Section 34-29n-11w, drilling at 1,741 feet, gas sand at 1,642 feet; Southwestern Development Co.'s No. 1 Atteberry, NE Section 24-31n-11w, down at 1,361 feet; Ross Bloomfield Royalty Co.'s No. 1 Viles permit, Section 11-29n-11w, shut down at 2,630 feet; Portage Oil & Gas Syndicate's No. 1 Glade, SW Section 24-30n-13w, set 6⅝-inch casing at 1,798 feet; Ringle's No. 1, Section 26-27n-11w, down 325 feet; Continental Oil Co.'s No. 1 Table Mesa, Section 3-27n-17w, down 600 feet; San Juan Petroleum Corp.'s No. 1 Palmer, Section 17-29n-13w, underreaming 8¼-inch casing at 1,025 feet; R. M. Smith's No. 3 Bishop, Section 22-29n-11w, down 699 feet, oil sand at 653 to 687 feet; R. M. Smith's No. 2 James, NW NW Section 23-29n-11w, ready to spud; Aztec Petroleum Co.'s No. 1 McCoy, NE SE Section 9-30n-11w, operations suspended 1,200 feet; R. M. Smith's No. 1 Ransom, SE SW Section 14-29n-11w, production 770 feet 8 bbls. daily; Coon, Hennis Syndicate's No. 1 Haren, down 112 feet; A. M. Edwards, trustee, No. 1 Jackson, Section 21-29-11, oil showing at 740 feet; W. R. Childers Oil Co.'s No. 1 Ute, Section 24-31-15w, capped at 2,130 feet, gas well; Continental Oil Co.'s No. 23 Rattlesnake, Section 12-29n-19w, standing cemented at 856 feet; Continental Oil Co.'s No. 17 Rattlesnake, Section 2-29n-19w, down 3,785 feet; Continental Oil Co.'s No. 20 Rattlesnake, Section 3-29n-19w, completed at 862 feet in Dakota sand; Union Oil & Mining Co.'s No. 2 Pine, C SE SW Section 8-29n-9w, shut down 2,950 feet, 1,000 feet oil in hole; Continental Oil Co.'s No. 8-A Table Mesa structure, completed as producer in Dakota sand at 1,420 feet.

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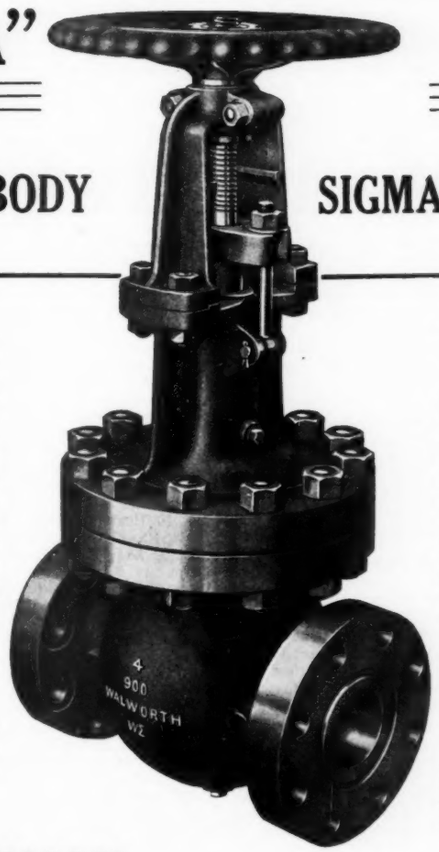


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# Gulf Coast Fields Decline 5,000 Barrels

## Only 21 Completions, 5 Dry, With 4,098 Barrels New Production Against 10,030 Previous Week

By P. L. McGreal
*Staff Correspondent, Gulf Coast Fields*

HOUSTON, Tex., Mar. 21.—The week has been one of the quietest in the Gulf Coast country during the past year, and no new work is anticipated until conditions improve. As one operator briefly expressed it, "You cannot drill a hole a mile into the ground for $1.20 oil without losing money." The completions during the week total 21, of which 5 were dry. The new production is only 4,098 bbls., compared with 10,030 bbls. last week. Seven holes were bailing at the end of the week.

Wildcats drilling on or around saline domes and abandoned during the week include the following: In Brazoria County, the Gulf Production Co. quit No. 1 Perry, on the south side of the Stratton Ridge Dome, at 5,050 feet. The Texas Company quit No. 1 Sweeney, near Danbury, in the same county, at 1,380 feet. On the Long Point Dome in Fort Bend County the Gulf Production Co. abandoned No. 1 Trone in gyp at 980 feet. Off the Hawkins Dome in Matagorda County the Gulf company abandoned No. 1 Sandborn at 3,665 feet. Over in Louisiana, on the Hackberry Island Dome, Cameron Parish, the Union Sulphur Co. plugged and abandoned No. 1 Vincent at 1,801 feet.

### Estimated Gross Production

The estimated daily average gross production of the Coastal pools for the week of March 19 is placed at 153,758 bbls. The estimate for each pool is as follows:

| Pool— | Dy. Av. |
|---|---|
| Boling | 825 |
| Batson | 1,455 |
| Blue Ridge | 2,810 |
| Big Creek | 4,775 |
| Barber | 750 |
| Dayton | 55 |
| Damon Mound | 950 |
| Edgerly (La.) | 875 |
| Goose Creek | 7,250 |
| Humble | 3,975 |
| Hull | 16,420 |
| High Island | 575 |
| Jennings (La.) | 1,040 |
| Lockport (La.) | 4,350 |
| Markham | 800 |
| Nash | 825 |
| Orange | 5,140 |
| Orchard | 40 |
| Pierce Junction | 10,100 |
| Piedras Pintas | 160 |
| Spindletop | 61,000 |
| Saratoga | 1,280 |
| Sour Lake | 5,150 |
| South Liberty-South Dayton | 3,936 |
| Stark (La.) | 2,300 |
| Vinton (La.) | 5,250 |
| Welsh-Anse La Butte (La.) | 60 |
| West Columbia | 9,992 |
| Miscellaneous | 1,620 |
| Total | 153,758 |
| **Southwest Fields** | |
| Luling | 18,300 |
| Mirando | 14,200 |
| Somerset | 1,490 |
| Callahan | 40 |
| Rockdale-Minerva | 975 |
| Lytton Springs | 2,220 |
| Total | 37,225 |
| Grand total for week | 190,983 |
| Grand total for last week | 195,983 |
| Net decrease | 5,000 |

### Completions During Week

In the Blue Ridge Pool the Navarro Oil Co.'s No. 2-A Robinson is heading 500 bbls. at 2,100 feet. It is on the northwest flank of the dome. The Gulf Production Co.'s No. 8 West Schenck will make a pumper at 3,900 feet.

No completions were made in the new deep sand section on the northwest flank of the Pierce Junction Dome during the week. On the east side, where the first production was found, the Navarro Oil Co. worked over No. 2 Cain into a 15-bbl. well at 2,150 feet. The Gulf Production Co.'s No. 20 Taylor will make a pumper at 3,800 feet. In the Goose Creek Pool the Gulf Production Co.'s No. 13 Chapman-Bryan is credited with 350 bbls. at 4,400 feet. Same company's No. 32 Beaumont is pumping 80 bbls. at 4,000 feet. The Humble Oil & Refining Co.'s No. 17 Peninsula is a salt water hole at 4,210 feet. The Gulf Coast Oil Co.'s No. 24 Guillard is bailing at 2,785 feet.

In the Orange Pool the Tillery Oil Co.'s No. 2 State land, on the bank of Cow Bayou, is pumping 125 bbls. pipe line oil at 3,390 feet. It was plugged back from 3,500 feet, where it bailed salt water.

On the north side of the old South Liberty Pool The Texas Company's No. 6 Staiti is pumping 100 bbls. at 3,525 feet.

But two completions were recorded in the Hull Pool, and these were both worked-over holes. The Republic Production Co.'s No. 10 Dolbaer is good for 100 bbls. at 2,600 feet and No. 15 Dolbaer is pumping 75 bbls. at 3,500 feet.

In the West Columbia Pool the Gulf Production Co.'s No. 9 Eyres was worked over at 2,900 feet and is pumping 10 bbls.

### Harris County Pools

In the deep sand section on the southwest side of the Sour Lake Pool, the Gulf Production Co.'s No. 4 Ebberts is going on the beam at 3,950 feet, as is its No. 5 Jackson at 4,000 feet. The same company's No. 2 Thompson will pump at 3,000 feet.

In the Saratoga Pool the Skinner Oil Co.'s No. 2 Brooker is pumping 8 bbls. at 800 feet, showing 10 per cent water.

In the Batson Pool the East Batson Oil Co.'s No. 1 Crawford is pumping 10 bbls. at 1,325 feet. S. R. Buchanan's No. 92 Milhome is bailing at 1,360 feet and the Paraffine Oil Co.'s No. 34 Haywood is doing the same at 1,050 feet.

### South Louisiana Pools

The best well of the week is in the deep sand, Lockport Pool, near Lake Charles, Calcasieu Parish, where the Vacuum Oil Co. and Gulf Refining Co. are operating jointly in a marshy section. Their joint No. 13 Miller is flowing 1,200 bbls. at 4,400 feet, with a heavy gas pressure. Joint No. 2 Friedberg & Wolff is bailing at 4,383 feet with screen set in 14 feet of sand. Joint No. 3 Bordages is bailing at 4,573 feet.

In the Vinton Pool, the Vinton Oil Co.'s No. 6 Rescue is pumping 40 bbls. at 2,125 feet. The Gulf Refining Co. abandoned No. 41 Starr at 3,900 feet.

### Operations in the Pools

The Rainbow Oil Co.'s No. 1 Cotton at Saratoga is a location. The Cotton Oil Co.'s No. 2 Pope-Ellis, drilling 750 feet. The Sun Oil Co.'s No. 173 Texas Crude is deepening at 730 feet. The East Side Oil Co.'s No. 1 Ogden is drilling 1,600 feet.

The Kirby Oil Co.'s No. 7 Hodges at Batson set casing 1,125 feet. The Texas Company's No. 3 LeJarza is drilling at 4,350 feet. Deutser Oil Co.'s No. 1 Colorado and Batson Syndicate, at 1,050 feet. East Batson Oil Co.'s No. 8 Counzleman, 825 feet. Gulf Production Co.'s No. 65 Choate, rigging up.

In the Sour Lake Pool, the Humphreys Corp.'s No. 1 Geisecke and No. 1 Gordon are standing; The Texas Company's No. 1 Homestake is a location; Sun Oil Co.'s No. 1 F. H. Carpenter set casing 4,550 feet.

At Goose Creek, the Humble Oil & Refining Co.'s No. 56 Simm-Smith is drilling at 3,550 feet; No. 70, fishing 5,075 feet; No. 17 Gaillard Peninsula, shut down 4,200 feet; No. 31, pulling strainer 3,000 feet; No. 32, drilling 4,625 feet; No. 10 Beaumont-State, drilling deeper; M. & B. Oil Co.'s No. 6 Scorrega, drilling 300 feet; Lake Shore Oil Co.'s No. 3 Duke, at 3,000 feet; Gulf Production Co.'s No. 27 Ashbel-Smith, at 800 feet; No. 24 Beaumont Petroleum, drilling deeper.

The Republic Production Co.'s No. 33 Dalheen, in Hull Pool, is drilling 3,150 feet; No. 35, drilling deeper; Mecom Oil Co.'s No. 1 Taylor, drilling deeper; Cannon & Davis' No. 1 Crosbie, shut down at 1,100 feet; The Texas Company's No. 2 Hannah, drilling 3,575 feet; No. 1 Armelin fee, drilling deeper; Empire Gas & Fuel Co.'s No. 24 Barngrover, drilling 2,675 feet; Hull Oil Co.'s No. 2 Harrison, shut down 3,150 feet; Gulf Production Co.'s No. 83 Phoenix, drilling 3,100 feet; No. 84, drilling at same depth; No. 85, at 2,600 feet; No. 19 J. C. Baldwin, at 3,000 feet; Humble Oil & Refining Co.'s No. 1 Merchant, at 4,100 feet.

The Texas Company's No. 51 Hogg at West Columbia is drilling at 2,800 feet; No. 23 Arnold is a location.

In the South Liberty-South Dayton Pool, The Texas Company's No. 7 Staiti is drilling below 1,600 feet, and No. 4 Simms is deepening. The Humble Oil & Refining Co.'s No. 7 Welder set casing at 3,700 feet; Associated Oil Co.'s No. 1 Hirsch-Conley, drilling 3,010 feet; Gulf Production Co.'s No. 2 H. H. Marshall fee, rigging up; No. 1 R. G. Palmer, drilling 4,800 feet; No. 1 W. L. Bingle and others, at 3,100 feet.

At Blue Ridge, Navarro Oil Co.'s No. 1 Robinson "B" is drilling at 3,775; No. 2, location; Humphreys Corp.'s No. 3 West-Schenck, rigging up; Abercrombie's No. 1 Robinson "A," drilling 3,650 feet; No. 3 West Schenck, derrick; No. 9, rigging up; Gulf Production Co.'s No. 9 Bassett Blakeley "B," drilling 2,400 feet; No. 15 Blakeley "C," at 1,300 feet; No. 5 Invincible Oil, at 1,200 feet; No. 8 West-Schenck will pump 3,900 feet; No. 9, drilling 3,100 feet; No. 10, L. W. Luscher, rigging up; Overly Production Co.'s No. 1 Blakeley, drilling 1,250 feet; W. E. Woodruff's No. 1 Adams, at 450 feet.

In the Pierce Junction sector, the Navarro Oil Co.'s No. 2 Humble is a derrick. The Rio Bravo Oil Co.'s No. 1 P. F. Settegast, drilling deeper; No. 3, drilling 4,200 feet; No. 3 Bender, at 3,025 feet; Marland Oil Co.'s No. 4 Prudent Investment Co., at 2,975 feet; The Texas Exploration Co.'s No. 10 Dooley, at 3,890 feet; Humphrey's Corp.'s No. 2 Liggett, derrick; Mike Kouri's No. 2 Jones, drilling 2,050 feet; W. F. Martin and others' No. 1 J. C. Settegast, at 3,410 feet; Gulf Production Co.'s No. 2 W. H. Jones fee, at 3,300 feet; No. 20 Taylor and others will pump at 3,800 feet; No. 1 J. W. Saunders, drilling 1,800 feet; Smith and others No. 1 Parsons, at 4,275 feet.

The Texas Company's No. 3 fee at Big Creek is drilling at 3,600 feet; Gulf Production Co.'s No. 38 T. W. Davis, at 3,950 feet; No. 1 J. H. P. Davis, at 3,000 feet; No. 1 J. H. P. Davis "A," at 2,000 feet; No. 2 Hubert Hansler, at 1,950 feet.

The Sun Oil Co.'s No. 11 Cade at High Island is drilling at 3,200 feet; No. 12 Lockhart, at 1,600 feet; No. 9 Cade "C," at 2,000 feet; Gulf Production Co.'s No. 3 George E. Smith "A," at 3,050 feet; No. 7 George E. Smith, at 2,550 feet.

In the Humble Pool, the Sun Oil Co.'s No. 4 Bender, on the west side, went into salt water around 2,900 feet. Czeaux & Martin's No. 1 Wheeler and Pickens was abandoned between 3,700-3,800 feet. Benedum & Trees' No. 1 Hirsch is in sand at 4,508 feet. Barclay & Meadows set casing in No. 3 Burt, a deep test.

The Texas Company is replacing some of its old earthen storage tanks in the Humble Pool with steel. Work has started on the construction of eight 55's.

In the Orange Pool, the Gulf Production Co.'s No. 3 Granger is below 3,100 feet. A location has been made for No. 11 Peveto. The Rex Petroleum Co.'s No. 13 Carbello is drilling at 2,900 feet; Humble Oil & Refining Co.'s No. 6 Winifree, drilling deeper; Rycade Oil Corp.'s No. 2 State "B," at 3,850 feet; Texhoma Oil Co.'s No. 15 Chesson, drilling deeper; Atlantic Oil Producing Co.'s No. 2 Moore, shut down at 3,350 feet; Gulf Coast Oil Corp.'s No. 5 Leon, drilling 3,825 feet.

At Edgerly, the Gulf Refining Co.'s No. 44 Bright Penn, drilling at 100 feet; Rex Petroleum Co.'s No. 5 Hunter, at 3,110 feet; C. M. Crotty's No. 12 Lilliard, drilling deeper; Hercules Oil Co.'s No. 1 Paraffine, at 150 feet.

In the Lockport (La.) Field, the Vacuum-Gulf's No. 8 Miller is drilling at 4,300 feet; No. 14, at 3,225 feet; No. 7, drilling deeper; Nos. 15 and 16, loca-

(Continued on Page 99)

## WORKING OVER WELLS AT SPINDLETOP HELPING TO MAINTAIN THE AVERAGE

By P. L. McGreal

BEAUMONT, Tex., Mar. 21.—They are working over some of the earlier wells in the deep sand section of the Spindletop Pool, which helps maintain the daily average above 60,000 bbls. The Rio Bravo Oil Co.'s No. 5 T. & N. O. was worked over around 3,400 feet and increased to 850 bbls. per day. The Gulf Production Co. did the same with No. 5 Mann at 3,400 feet and it is pumping 150 bbls. Gulf company's No. 7 Roche is bailing at 4,150 feet as is the Yount Lee Oil Co.'s No. 14 McFaddin at 2,790 feet.

The status of drilling wells at the end of the week was as follows:

The Yount Lee Oil Co.'s No. 24 McFaddin was coring sand at 4,282 feet; No. 25 also coring at 3,106 feet; No. 27 drilling at 2,842 feet; No. 28 at 2,550 feet; No. 24 at 1,314 feet; No. 6 Gladys City, coring at 2,882 feet; No. 9 drilling 6,321 feet; No. 17 at 1,673 feet; No. 23 at 2,929 feet; No. 24 coring, 2,895 feet; No. 25 drilling at 304 feet; No. 4 Trembly, at 3,486 feet; No. 6 Davis at 3,506 feet; No. 11 Gladys City, rigging up to work over; No. 25 fee, rigging up. Atlantic's No. 1 McLean, drilling at 2,750 feet; No. 8 drilling deeper. Deep Sand Oil Co.'s No. 1 Rush, fishing at 3,600 feet. Hines Oil Co.'s No. 2 Parker, drilling at 2,850 feet; No. 1 Gordon, at 5,030 feet; No. 2, a derrick. Sun Oil Co.'s No. 2 McLean, drilling 4,650 feet; No. 3 standing 5,675 feet; No. 4 drilling 5,090 feet; No. 9 at 3,150 feet; No. 1 Price, at 4,075 feet; No. 2 at 2,400 feet. Rio Bravo Oil Co.'s No. 101 T. & N. O. at 3,100 feet. Turnbow Oil Co.'s No. 1 Weed, at 5,000 feet. Plummer Oil Co.'s No. 1 Quinn, derrick. Walker Oil Co.'s No. 1 Quinn, fishing 5,475 feet; Nos. 1 and 2 Weed, derricks. Magnolia Petroleum Co.'s No. 3 fee, drilling 1,125 feet; No. 4 at 900 feet. Kinnear Oil Co.'s No. 1 Gladys, derrick. J. O. Davis' No. 1 Gladys, drilling 3,550 feet. Gulf Production Co.'s No. 12 James F. Weed "A", at 4,900 feet; No. 9 Oakwood, at 4,900 feet; No. 10, at 1,300 feet; No. 4 Mann, drilling deeper; No. 223 Gladys, drilling 700 feet.

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DENVER HOUSTON TULSA

# Bruni Wildcat 50,000,000-foot Gasser

## Four Miles East of Mirando and Three Miles North of Production. No Slowing Down of Operations

By B. D. Stevenson
*Staff Correspondent, Southwest Texas Fields*

SAN ANTONIO, Tex., Mar. 21.—The most important completion last week in Southwest Texas was the Killam-Maddox No. 1 Bruni, in the northwest corner of the south 80 acres out of Block 65 of the Bruni tracts in the lower part of Webb County, a 50,000,000-foot gas well at a depth of 2,144 feet. Casing was set at 2,136 feet and the sand depth is 2,137-44 feet. It is 4 miles east of the line of production in the Mirando Field and about 3 miles north of the nearest production of oil or gas in the K. & S. extension of the Henne, Winch & Fariss Pool in Jim Hogg County. It is somewhat between the O'Hern & Seacord Pool in Survey 174 of Duval County and the Henne, Winch & Fariss Pool. It was really a wildcat test but is in the vicinity of proven production. The well was completed late last week and is in good shape. The depth of the sand is practically the same as in the Henne, Winch & Fariss Field and the K. & S. extension in a sand that is producing both oil and gas in the fields to the south. The well is about 8 miles southwest from the O'Hern & Seacord wells in Survey 174 and completions north of the O'Hern & Seacord wells seem to merge that into the Cole Field 5 miles north. With this new gasser 3 miles northeast of the K. & S. extension and 8 miles southwest of O'Hern & Seacord and with the K. & S. production gradually extending for some weeks back in that direction a great deal of territory in the southeast corner of Webb County is made to look good. It is in this corner that O. W. Killam, who discovered the Mirando Field, recently leased 15,000 acres from A. M. Bruni and has since checkerboarded it with the Magnolia.

### No Slowing Down

In the line of producers the past week was rather light all through Southwest Texas. There is practically no change in the total number of operations listed in Southwest Texas, the total for the territory being about 300, including wildcat as well as proven, and so far as can be seen at this time there is nothing to indicate that drilling operations will be slowed down much, if any, by the cut in crude prices. Proven fields for some weeks past have been drilled only to meet lease requirements and to hold up production, there being no new fields in Southwest Texas that are in a stage where offsets are forced and a big campaign on. Grayburg Oil Co. has started the first of 20 wells in Somerset, an old and settled field, merely for the purpose of holding its production from its own leases at a figure of about 600 bbls. a day. In the Laredo territory there will continue to be considerable drilling called for by contracts to supply four important pipe lines with gas, one of which is contracted for and to be completed by August of this year. This gas development is, of course, not affected by the cut in crude but any gas well may run into oil production. Drilling for gas in Live Oak County, Refugio and Kleberg is also unaffected by any cut in crude.

Two producers were completed in the Laredo district last week. One was the Killam-Maddox gasser reported above. The other was the Magnolia's No. 26 Martinez, in Survey 276 of Jim Hogg County, at the south end of the Henne, Winch & Fariss Pool, a 25-bbl. well at 2,009 feet. Wells abandoned during the week in semiproven territory include the Crown Central's No. 10 Garcia in Block 56 of Survey 606, Webb County, Mid-Ojuelos Pool, a deep test, abandoned at 4,751 feet. It seems to have disclosed nothing particularly of interest except a good straight hole. It is in the midst of producers at around 1,700 feet and shallow sands were all cased off for a deep test. R. F. Duggan abandoned No. 1 E. Garcia, Block No. 2 of Survey 608, Webb County, a little northeast of where Edward St. Albans has lately completed a 25-bbl. oil well on the Puig ranch 2 miles east of production. Depth was 2,325 feet. In Duval County Gulf Production Co. abandoned its No. 1 Tinney on the Piedras Pintas salt dome at Noleda at 4,004 feet. At one time around 3,500 feet it showed quite a little oil and was tested. It is one more failure on the Piedras Pintas salt dome that to date has furnished but two producers.

### San Antonio Territory

In the Luling Field, Caldwell County, Magnolia Petroleum Co. completed a 25-bbl. well in No. 23 Martinez in the H. Cottle Survey. In Medina County Western Gas & Fuel Co. completed No. 6 Adams at 948 feet making 13,000,000 feet of gas. In Live Oak County gas field Houston Oil Co. completed No. 1 Brown at 2,035 feet good for 40,000,000 feet of gas, and in Refugio County gas field the same company completed No. 9 J. J. Heard at 1,567 feet good for 30,000,000 feet of gas.

Abandonments last week were W. G. Clark's No. 1 Adair, McGloin Survey, at the north end of the Cartwright gas field, abandoned at 2,515 feet, de[illegible] Oil Co. abandoned its No. 1 Zinger.

### Kingsville Field

In the Kingsville Field, Kleberg County, the interest this week is in No. 3 Kleberg trustee, 1,000 feet west of the Kleberg trustee No. 2. The No. 2 is a producing oil well in sand at 2,235-78 feet. No. 3 late last week was coring at 2,508 feet and had found nothing worth while. The well penetrated an oil sand at 2,420-40 feet, with considerable pyrites of iron and a little of the bottom of the sand carried a saturation of oil. The well reamed down with 9⅞-inch bit to gumbo at 2,441 so as to be able to set 6⅝-inch casing later if needed, and drilling was resumed. Another sand is looked for at about 2,700 feet.

### Cole Gas Field—Duval County

Cole Petroleum Co.'s No. 23 Benavides, Survey 8, Block 9, located 150 feet to southwest and northwest lines, is standing at 3,475 feet; No. 33 Benavides, Survey 15, Block 14, located 660 feet to northwest and northeast lines, is drilling at 1,000 feet; No. 34 Benavides, Survey 14, Block 12, located 450 feet to northwest and southwest lines, is drilling at 450 feet. Active drilling has not started on Nos. 35, 36, 37 and 38, though derricks have been erected. Barkley-Meadows-Morgan-Gulf are making location for No. 4 King-Harper, in Survey 232; No. 3 King-Harper, Survey 323, located 150 feet to northwest and southwest lines, has spudded in and set surface casing. Houston Oil Co.'s No. 7 Benavides, Survey 10, Block 16, located 155 feet to southeast and southwest lines, is rigging up. Houston Oil-Sun Oil Co.'s No. 1 "A" Benavides (formerly No. 4 "B"), located on the corners of Blocks 475, 476, 477 and 478, has been spudded in; No. 2 "A" Benavides (No. 5 "B"), Blocks 407, 408, 409 and 410, is erecting derrick. Houston Oil-Claggett's No. 1 S. Benavides, Survey 714, located 155 feet to SE cor., is a location. Cin-Tex Petroleum Co.'s No. 2 Willman, Survey 354, located 1,050 feet

(Continued on Page 94)

## RANK WILDCAT IN DUVAL COUNTY THREATENED TO BLOW TOOLS OUT

By B. D. Stevenson

SAN ANTONIO, Tex., Mar. 21.—In the Laredo territory the past week, in the northwest corner of Duval County, approximately 10 miles from the north and 8 from the west line of the county, Magnolia Petroleum Co. got a gas pressure in its No. 1 Hahl, a rank wildcat in the southeast corner of Survey 51, that threatened to blow the tools out of the hole. The sand was from 4,070-90 feet, and casing has been set at 4,070 feet. The well will be tested early this week. It threatened several times to bring the fluid out of the hole. The finding of this sand follows fast on the heels of the H. B. Schlessinger well in Survey 76, about 3 miles southeast of the Magnolia well, which at 2,473-82 feet had a sand that tested a small amount of oil. The territory is 20 miles from any production, but is near the Reynosa escarpment, along which considerable of the production of the Mirando Field is located.

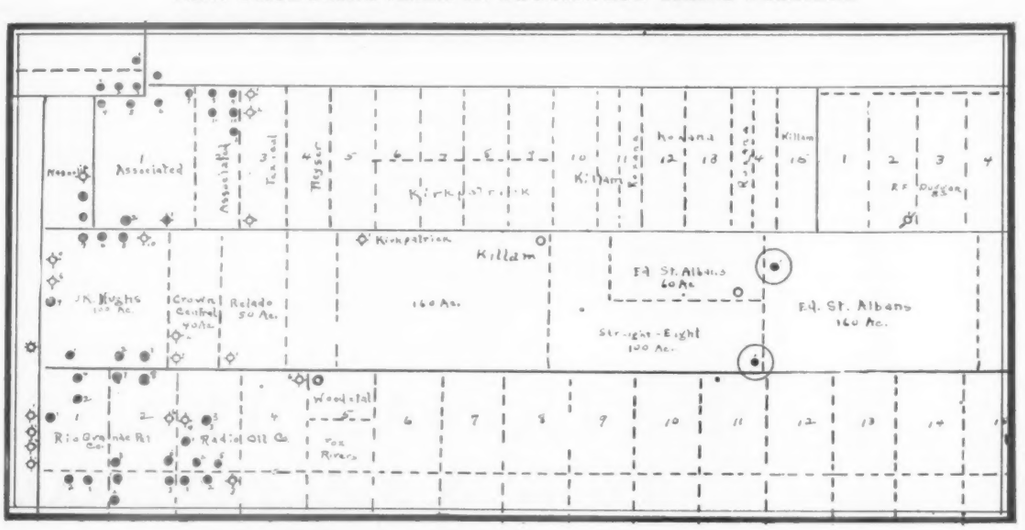
Another feature of the week is the completion of the fishing job in Maverick County in the Rycade Oil Corp.'s No. 1 Chittim, which topped a gas sand at 5,515 feet several months ago that made about 4,000,000 feet of gas and a few barrels a day of very light oil. It drilled to 5,525 feet without increasing the volume to amount to anything, and then lost tools in the hole, and has been fishing ever since. It is resuming drilling, and may furnish some further interesting information.

### Val Verde Wildcat Test

Magnolia Petroleum Co. has made a location in Val Verde County on the

(Continued on Page 91)

## NEW PRODUCING AREA IN SOUTHWEST TEXAS POSSIBLE




SAN ANTONIO, Tex., Mar. 21.—Two wells 2 miles east of the line of production in the Mirando Field in Webb County strongly point to the probability of a new producing spot. Straight Eight Oil Co. early in January completed its No. 1 Puig with sand depth 1,852-57 feet, total depth 1,859 feet. When put on the pump it made 200 bbls. of fluid, of which about 8 per cent was oil. It is shown on the map as the lower one of the two wells enclosed in large circles. It is 150 feet from the east and south lines of the lease.

In a sand at 1,861-63 feet a little north of the Straight Eight, 450 feet from the north line and 150 feet from the west line of the 160-acre tract, shown on the map as the upper of the two wells in large circle. Edward St. Albans completed his No. 1 Puig, and on the pump it is making about 25 bbls.

The Aviator Pool of the Mirando Field is shown at the left end of the map and extends both north and south beyond the limits of the map.

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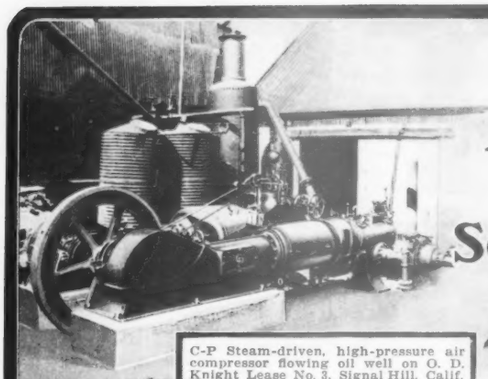
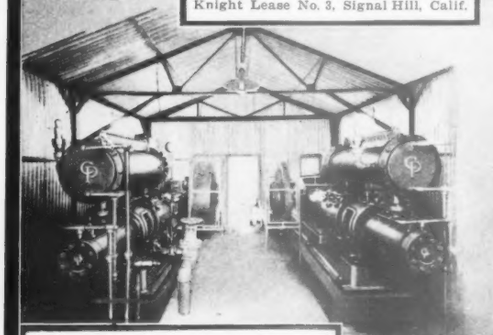


C-P Steam-driven, high-pressure air compressor flowing oil well on O. D. Knight Lease No. 3, Signal Hill, Calif.



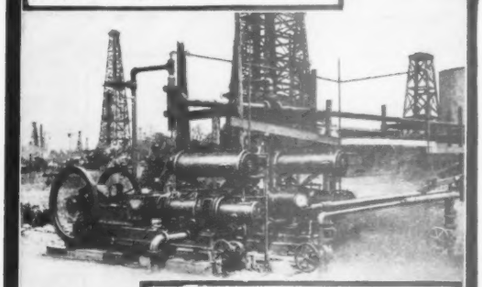
Two CP Two-Stage electric-motor driven compressors, installed for one of the major oil companies in Garber, Okla., field cutting operating cost in excess of 47%.

## SEMINOLE OIL POOL REACHES NEW PEAK

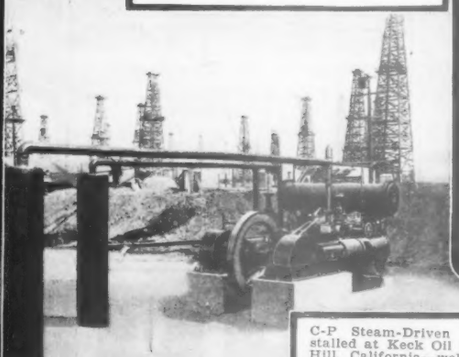
### Produces 299,860 Barrels From 232 Wells.

*Special Dispatch to* THE SUN.

TULSA, Okla., Feb. 15.—The Seminole area reached a new high mark in production yesterday when output of 232 producers made 299,860 barrels in the twenty-four hours ended at 7 o'clock A. M. This represents a gain of 70,494 barrels in production and of twenty-six completed wells during the first two weeks of February.



C-P Two-Stage, Straight line steam-driven Compressor; two of six installed for General Petroleum Co., on Twin Bell Lease, for the flowing of 6 oil wells.



C-P Steam-Driven Compressor, installed at Keck Oil Syndicate, Signal Hill, California—well No. 1.

AND up in Montana they are using CP Compressors: First well equipped was under the conventional system, producing 700 bbls. fluid containing 80 bbls. oil—now pumping 1600 bbls. fluid, 570 bbls. oil. Second well formerly pumped 600 bbls. fluid with only a trace of oil, now pumping the CP way, 1900 bbls. fluid—114 bbls. oil. Third well pumping 800 bbls. fluid—80 bbls. oil is now delivering 5000 bbls. fluid exceeding 1000 bbls. oil.

CP Air Compressors are extensively used in oil field service on account of their ruggedness, ease of portability, dependability and the wide range of cylinder sizes available to meet changing conditions. CP Engineers will be glad to help you determine the size and type machine best suited to your requirements. C-242

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# Bossier Parish Wildcat Sprays Oil

## Carterville Outlook Awaiting Test. Semiwildcats in Rayville and Georgetown Interesting

By James H. Dameron
*Staff Correspondent, Louisiana-Arkansas*

SHREVEPORT, La., Mar. 21. — A wildcat in northern Bossier Parish spraying oil, two semiwildcat oil wells in the central part of Louisiana, and a 2,750-foot well in Smackover, Ark., constituted the big news from the Louisiana - Arkansas division during the week.

Woodley & Collins and Atlantic Oil Producing Co.'s No. 2 L. & A., Section 14-23-12, in the Carterville area of north Bossier Parish, ballooned the hopes of Carterville operators when it was bailed in making 5,000,000 feet of gas and spraying oil. The well did not perform true to form of wells of that area and it will probably be several days in telling the story of Carterville so far as it can.

Production from the well is coming through 8¼-inch pipe and from the Woodbine sand at 3,076-81 feet. The well sprayed oil at an estimated rate of from 75 to 100 bbls. when it settled down after cleaning itself. A few hours later the volume of gas had dropped as did the oil production which showed a little salt water. About 12 hours later the well stopped producing either gas or oil. A few hours after that it made a head estimated to be a little better than 10 bbls. of 32-gravity oil. The control head was closed and opened about an hour later and the well made about 500,000 feet of gas and a little salt water. Probably 2-inch tubing will be set Monday. The well is standing 2,300 feet in oil. When bailed Saturday the slight water show did not increase.

Because of the small amount of production and the big casing the operators did not expect the well to flow more than a few hours. Drillers were of the opinion the well would flow by heads. The casing was cemented at 3,064 feet on a cap rock and from that depth to 3,072 feet the formation was sandy shale. The last few inches of the sand cored from 3,076-81 feet showed oil.

No. 2 L. & A. is about 2 miles northeast of Woodley & Collins' No. 1 Roberson in Section 22, which blew in from the same horizon making 40,000,000 feet of gas. Bahan and Amerada Petroleum Corp.'s No. 1 Mays, Section 27-23-12, a half mile southwest of No. 1 Roberson, was completed the first part of the week in the Woodbine sand making 35,000,000 feet of dry gas. The big gas was missed in No. 2 L. & A. The only time it made a big volume of gas was when it blew in and it rapidly settled down to 5,000,000 feet.

### Rayville's Biggest

In northeastern Louisiana the wildcat development in the Rayville area took a sensational turn the latter part of the week when Gulf Refining Co.'s No. 1 Marshfield, Section 30-17-6e, blew out at 2,397 feet making 25,000,000 feet of dry gas, the biggest of the wells completed there to date. The well is a little over a mile to the northwest of the Gulf company's discovery well. All three wells in the Rayville territory are gas wells. Two are producing from the Trinity horizon in the opinion of most geologists.

No. 1 Marshfield drilled through red shale and gumbo from 2,390-93 feet and red and gray shale streaked with sand from 2,393-97 feet. The crew was coming out of the hole with a core when the well blew in. The drill stem was pulled out and the well is blowing in the air. Three and one-half miles to the west of No. 1 Marshfield, Ruston Drilling Co.'s No. 1 O'Neil, Section 35-17-6e, was bailed in at 2,443 feet and made practically the same volume of gas that it made when bailed at 2,417 feet and gauged 3,800,000 feet of gas. It is to be drilled deeper.

In Section 22-17-6e, Louisiana Petroleum Co.'s No. 1 Binion & Sarter was opened up and made around 2,000,000 feet of gas from 2,475 feet. It gauged the same amount of gas when tested at 2,439 feet. The liner is being pulled and the well is to be drilled deeper. S. D. Hunter's No. 1 McCoy, Section 29-16-6e, is drilling tough gumbo at 2,321 feet.

Between Bull Bayou and Dolet Hills, Magnolia Petroleum Co.'s No. 1 Mason, Section 28-12-11, in DeSoto Parish, is expected to prompt the drilling of a few more wells in that semiwildcat territory. No. 1 Mason was completed at 2,715 feet flowing 60-bbl. of clean oil.

### Best Well of Week

Leading all completions for the week was Paulette and associate's No. 1 Holmes, Section 17-9-1e, in the Georgetown semiwildcat area. The well is producing 300 bbls. naturally from sand at 1,597 to 1,603 feet. The oil is clean oil and the best completion in that territory, which is a few miles southwest of the Urania shallow field. It is an offset to the Gulf Refining Co.'s 30-bbl. pumper.

Pleasant Hill, in northern Sabine Parish, will draw a big "gallery" in a few days. The west offset to the Arkansas Fuel Oil Co.'s wildcat producer is waiting for 6 inch pipe to set at 3,100 feet. The production of the discovery well was 202 bbls. for the 24-hour period ending Saturday morning.

Gulf Refining Co.'s No. 12 Tyson, Section 14-21-15, in Pine Island, continues to better its Trinity horizon production. It is now producing more than 400 bbls. of 44 gravity oil daily. The deep producer was completed several months ago as a giant gasser and started making oil a few weeks ago.

Smackover's prize well of the week was Stewart and associates' No. 7 Murphy, Section 9-16-15, in the Norphlet area. The well was completed in the 2,750-foot sand at 2,756-71 feet, flowing 206 bbls. of oil through 2½-inch tubing. It is probably the biggest of the lower sand completions in Smackover. Smackover's big pay sands are the 2,200, 2,400 and 2,600-foot sands. Considerable of the drilling activity in Smackover at present is on wells formerly completed in one of the three higher sands which are being drilled down for deeper sand production.

Smackover, which has weathered through several price cuts without a change, was cut 10 cents at the first of the week when Mid-Continent crudes were cut for the third time in succession. The big drop in the price structures of Louisiana and Arkansas crudes is not at present reflected in drilling operations. Operating expenses are being curtailed by several companies through the laying off of men whose services are not urgently needed. Drilling is expected to remain practically the same in an effort to check a rapid fall in production from the old areas.

### Field Operations

Field operations during the current week showed a slight increase over the previous week's report. There are 212 wells drilling while last week the total of wells drilling was 207. Summarized, the week's activities are as follows: Completions, 31; wells waiting on standard rigs, 15; wells drilling, 212; rigs, 13; derricks, 45, and locations, 8.

Production in the division did not fall as sharply as was anticipated. High water was expected to cut deeply into the production of Smackover and Urania and slightly in other fields. However, Urania was the only field to be affected by high water. A good portion of that field was under water and its daily average for the week fell off 2,665 bbls. Gains in other Louisiana fields cut the net loss to 2,204 bbls. Arkansas recorded a gain of 860 bbls. in daily average, chiefly because of the gain in El Dorado.

**PRODUCTION BY FIELDS**

| | |
|---|---|
| **Louisiana** | |
| Caddo light | 10,050 |
| Caddo heavy | 4,580 |
| Homer | 5,300 |
| Haynesville | 7,935 |
| DeSoto and Red River | 4,010 |
| Elm Grove | 730 |
| Bellevue | 1,670 |
| Cotton Valley | 6,150 |
| Urania | 9,295 |
| Total | 49,720 |
| **Arkansas** | |
| Smackover heavy | 99,005 |
| Smackover light | 11,785 |
| El Dorado | 6,255 |
| Lisbon | 4,625 |
| Stephens | 1,310 |
| Nevada | 1,750 |
| Bradley | 200 |
| Total | 124,930 |
| Total both states | 174,650 |
| Total last week | 175,994 |
| Loss | 1,344 |

### Bossier Parish

In the Elm Grove district of Bossier Parish, Gulf Refining Co. is bailing its No. 6 Hodges, Section 24-16-12, to make a test at 1,561 feet. In the same area, Section 9-16-11, the Palmer Corp. is pulling the 6-inch casing at a total depth of 3,832 feet in its No. 3 Bossier. The Texas Company has set 63 feet of 10-inch casing in its new well, No. 14 Caplis, Section 24-16-12, and the hole now is at a depth of 580 feet.

The Humble Oil and Refining Co. has a derrick up for its No. 30 Bliss and Wetherbee, Section 15-19-11, in the Bellevue Field.

### Caddo Parish

Four completions were reported in Caddo Parish during the week, two being gas wells and two oil wells. The largest was Magnolia Petroleum Co.'s No. 19 Dillon, Section 24-21-15, which is estimated to be making 1,800 bbls. of oil at 1,625 feet. J. M. Miller's No. 6 Solley, Section 22-21-15 is pumping 5 bbls. at 1,680 feet. Owl Oil Co.'s No. 2 Wilburn, Section 4-17-16, was completed for a 2,000,000-foot gasser at 2,580 feet. Magnolia Petroleum Co.'s No. 1 Bell, Section 6-17-16, is making 13,000,000 feet of gas at 2,620 feet.

Operations in Caddo Parish were particularly active. In the Waskom area, Bahan and Bahan have a derrick pattern for their No. 1 Wilburn, Section 4-17-16. The same operators have a rig up for

# LEA COUNTY WELL MOST IMPORTANT IN ARTESIA FIELD IN PAST YEAR

By Special Correspondent

ARTESIA, N. Mex., Mar. 19.—The Inglefield, Bridges' No. 1 State well, in the SE SE, Section 4-17-34, Lea County, is standing with over 2,500 feet of oil in the 8¼-inch hole, with the rig shut down waiting for the erection of two 1,000-bbl. tanks being trucked to the lease from Borger, Tex. The bottom of the hole is 4,735 feet in a brown sandy lime that is believed to be carrying more oil. Most of the fluid came from a gray sandy lime topped at 4,705 feet, this being 11 feet through, according to a steel line measurement. The obtaining of oil in the Ingelfield, Bridges test is considered the most important happening here in the past year, as the well is located on the "caprock" or Staked Plains, 13 miles east of the Maljamar discovery well. It is believed a vast amount of potential oil land has been opened by the new wildcat, which is located on a block of 47,000 acres of state land none of which has been sold.

### Dr. Udden's Statement

In writing of the Staked Plains or Llano Estacado, Dr. J. A. Udden in his review of the Geology of Texas has the following to say: "The Panhandle High Plains and the Llano Estacado constitute the southern portion of the High Plains proper, which extend from northwestern Kansas as far south as the Edwards Plateau and the valley of the Pecos River. The deep valley of the Canadian separates the Panhandle High Plains from the Llano Estacado or Staked Plains. Both these divisions of the High Plains are similar in their characteristic. The High Plains region is a high isolated plateau or broad mesa, rising from surrounding rolling plains, in a nearly flat island like mass. On the west, southwest and south, the Llano Estacado is bounded by the valley of the Pecos, while its eastern escarpment is drained by the headwater of the Brazos and Colorado Rivers. The escarpment of the High Plains is formed by a limestone, locally known as the 'cap rock.' This is more resistant to forces of erosion than the underlying beds and forms an abrupt precipitous and nearly horizontal rim.

"Excepting the Toyah Basin of the Trans-Pecos region and the coastal margin of the Gulf Coastal Plain, the High Plains differ from all the other plains of Texas in being a surface formed by deposition. The High Plains are practically destitute of trees and are characterized by a sparse uniform covering of grasses. The surface has a general easterly to southeasterly slope of about 9½ feet per mile. The surficial rocks are later Cenozoic (Tertiary and Quaternary) in age and are for the most part unconsolidated. The deeper rocks consist of Permian and Triassic and some small remnant of Comanchean rocks, the Comanchean being nearly altogether confined to the southern border where they merge into rocks of the same age in the Edwards Plateau. The structure of the Permian rocks is that of a very broad basin, downfold or geosyncline, the lowest portion of which lies under the High Plains and which embraces all the territory between the Western Cordillera and the Edwards Plateau and Grand Prairie."

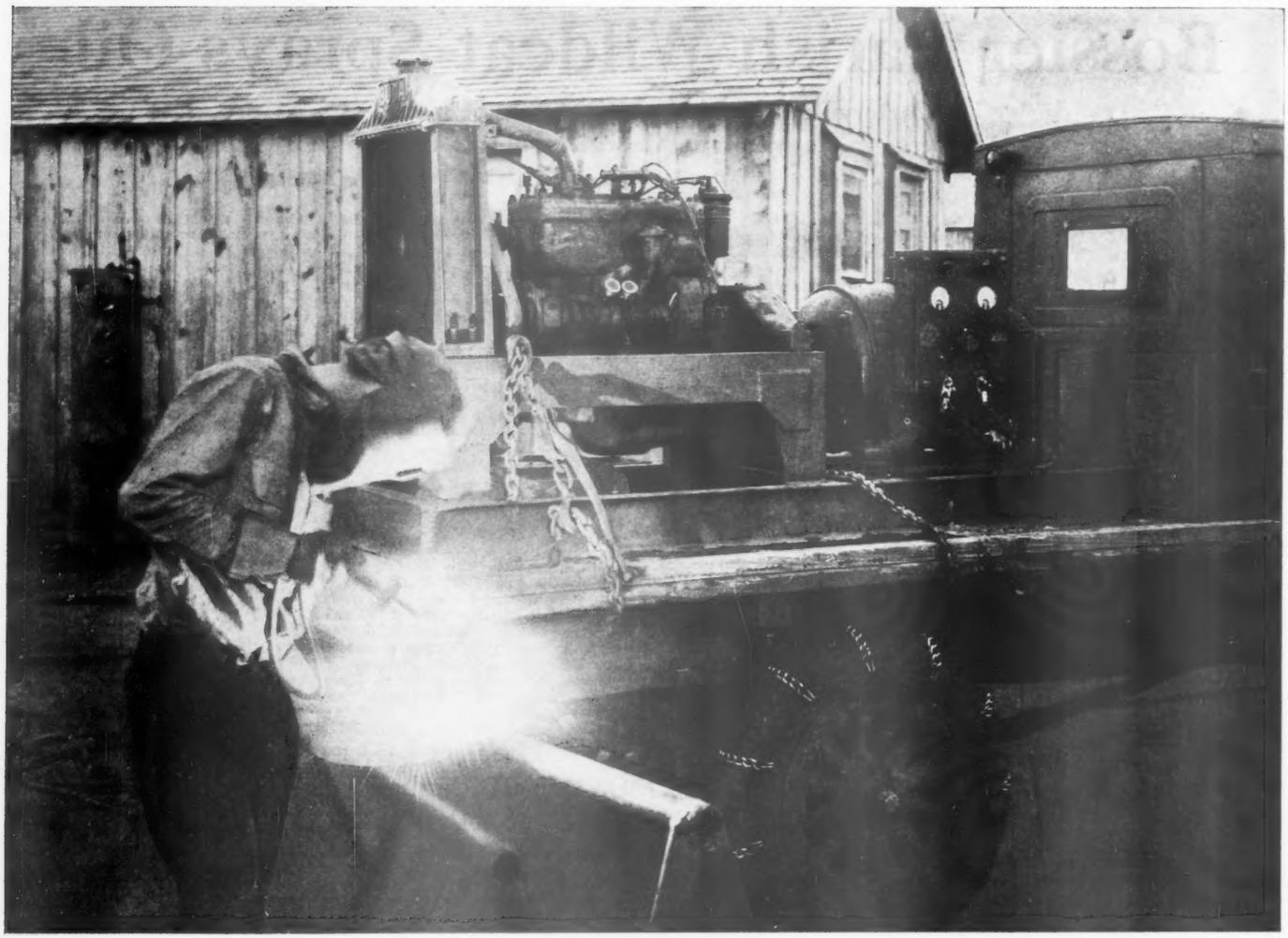
Many operators and geologists are of the opinion that any test put down on the Staked Plains now has a fair chance of making a producer.

### Maljamar Gets Good Well

Flowing by heads, following a shot of 270 quarts from 3,715 to 3,785 feet, the No. 1 well of the Maljamar Oil & Gas Corp. in Section 5-17-32, on the Grace Mitchell permit, is easily the best well completed by this company to date. It is believed the well will make 300 bbls. flush when put on production. The crew is waiting a string of 6-inch casing and when this has been run it is believed the well will flow naturally. The lower sands will probably be shot after a test has been made in the upper pays.

As a result of the production obtained

(Continued on Page 134)



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GENERAL ELECTRIC

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No. 2 Wilburn, same section. The Standard Oil Co. of Louisiana's No. 1 Trosper, Section 34-18-16, is drilling in lime at 2,250 feet.

L. A. Berston is starting drilling at 300 feet after having set 45 feet of 10-inch casing in No. 6 Murff, Section 12-21-16. In Section 1-20-16, the Bethany Oil and Gas Co.'s No. 1 Offenhauser is dry at 1,750 feet. This test had a showing of oil at 1,620 feet. The Big Lake Oil Co. is arranging to make a Halliburton test at 2,615 feet in No. 1 Rodessa, Section 23-23-16. In the southeast section of the parish, J. H. Brogden and others are drilling at 300 feet in No. 1 McMillan. The hole has 90 feet of 10-inch casing set.

In Section 2-20-16, Burford and others' No. 1 Dambly is shut down at 1,648 feet waiting orders. Dixie Oil Co. has cemented 6-inch casing in A-2 Noel, Section 13-21-15. Total depth of the hole is 3,633 feet. The same company in Section 13 is drilling out a plug at 3,727 feet in No. 81 Robertshaw. The No. 85 Robertshaw in Section 14 is being bailed for a test at 1,682 feet. The same company's No. 10 Slattery south of ths test in Section 27 is being cored at 3,791 feet.

**Other Caddo Operations**

The Double I Oil Co. has a derrick up for No. 9 Spell, Section 15-21-15. In Section 5-20-16, W. W. Dobson and others' No. 4 Rives is drilling at 1,640 feet. Feloon Drilling Co. has started a derrick for No. 1 Schmidt, Section 27-20-15. J. B. Files' No. 1 Payne, Section 35-23-16, is drilling at 920 feet. Another new test in the 21-14 area is the Gilliam Syndicate's No. 1 Taylor, Section 17. This is drilling at 160 feet after having set 10-inch casing.

A. C. Glassell is building a derrick for No. 1 Trigpen and Herold, Section 26-18-16. Gulf Refining Co.'s 264 Ferry Lake, Section 22-20-16, having been bailed at 2,330 feet, is waiting for a standard rig. The same company's No. 265, Section 28, also waiting for a standard rig, while No. 266 is beginning drilling at 145 feet. Ten-inch casing has been set. No. 267 is being rigged up. The same company's No. 3 Wemple in Section 14 still is shut down at 2,265 feet having been abandoned temporarily. Haynes Brothers also have abandoned temporarily their No. 1 in Section 8-19-16. Total depth of this hole is 3,712 feet.

H. M. Hancock is drilling at 900 feet in No. 1 Hampton. In Section 24-22-15, Lewis Oil Corp. is coring No. 9 C. M. L. Co., total depth 1,050 feet. Magnolia Petroleum Co. is setting 4½-inch casing at 2,910 feet in No. 2 Caddo, Section 8-20-15. The same company is perforating the 6-inch casing at 1,580 feet in its No. 16 Dillon, Section 24-21-15. The well has a total depth of 1,750 feet. Magnolia has cemented 6-inch casing in its No. 17 Doan-Thigpen, Section 6-20-15, at 1,390 feet, and in Section 7-21-14, this company is drilling in shale at 1,950 feet in its No. 4 Planters. In Section 23-21-15, this company's No. 20 Robertshaw is drilling lime at 2,504 feet.

H. H. Morris will standardize his No. 1 Fields, Section 24-22-15. He is waiting for the rig with the test at a depth of 1,070 feet. In the meantime he has made a location for his No. 2 Fields, same section. The Ohio Oil Co. also is waiting for a standard rig at its No. 3 Murray, Section 28-21-15, with the hole at 1,606 feet. Murphy and others have abandoned temporarily No. 1 Youree, Section 13-20-15, at a total depth of 2,302 feet. Ohio Oil Co. has a derrick for No. 1 Moddie-Fortner, Section 5-22-16. In the 17-16 area, the Owl Oil Co. will drill two new tests. It has a rig up for No. 1 Bell, Section 5, and a location for No. 3 Wilburn, Section 4.

**Try For Shallow Gas**

The Louisiana Refrigerator Products Co. is deepening a well, formerly drilled to 938 feet for water. The company is trying to get shallow gas. This well is No. 1 Fee, Section 2-17-14. Shreveport Oil Corp. is beginning drilling on its No. 2 State, Section 27-21-15. The bit is at 510 feet. In Section 23-22-15, the Standish Oil Producing Co. is rigging up No. 11 Allen. The Standard Oil Co. of Louisiana's No. 177 Stiles, Section 33-21-16, is waiting for a standard rig at 1,633 feet. The same company has had a derrick up for No. 178 Stiles, same section, for several weeks but has not started drilling. The Texas Company is drilling at 3,588 feet in its No. 47 C. M. L. Co., Section 23-21-15, and at 1,882 feet in its No. 6 Curtis, Section 14-20-16. The same company is fishing for a drill stem in its No. 2 Glassell, Section 14-20-15. The hole is at 2,960 feet. Six inch casing has been set in the Texas Company's No. 1 Hardy, Section 10-20-16, which is at a total depth of 2,280 feet. The No. 5 J. E. Herndon, Section 14-21-15, is being drilled in lime at 3,443 feet. No. 56 Hassell, Section 4-21-16, has had 6-inch casing set at 2,396 feet with the total depth of the hole at 2,408 feet. No. 5 Hicks and Payne, Section 21-21-15, is being drilled in lime rock at 2,784 feet. In Section 31-22-15, Thomason's No. 7 Muslow has 4½-inch casing cemented at 2,160 feet. In Section 32, Woodley Petroleum Co.'s No. 3 Muslow is waiting for a standard rig with the hole at 1,691 feet. In Section 15-20-15, Victor Wenzell has a derrick up for No. 4 Thomas.

**LaSalle Parish**

Modisette Drilling Co. has a derrick up for No. 4 Urania, Section 7-10-2, Urania district. Wingfield and others have shut down their No. 6 Urania, Section 2-9-1e, at 1,400 feet. There were two completions in LaSalle Parish during the week, neither making a producer. Hog Creek Oil Co. abandoned No. 1 E Dawson, Section 6-10-2e with the hole at 1,580 feet. Honeycutt and others abandoned No. 1 Morrow, Section 35-10-1e, and moved the rig. The hole was 1,560 feet deep.

**Monroe District**

In Moorehouse Parish, Consolidated Carbon Co.'s No. 1 White, Section 16-20-4e, is drilling at 710 feet. This test struck a water flow at 320 feet. Louisiana Development Co. has a derrick for No. 38 Fee, Section 21-20-5e. The Standard Oil Co. of Louisiana is drilling at 1,544 feet in gray sand in No. 4 Interstate, Section 27-20-6e.

Easterling and others' No. 1 Sicard, Section 18-18-4e, Ouachita Parish, is drilling at 2,070 feet. In the same section, the Jordon Drilling Co. is at 190 feet in No. 1 Moore, with a 12-inch hole. Ladell Properties, Inc., in Section 1-19-4e has a derrick for No. 39 Fee. Natural Gas Products Co. has cemented the 6-inch casing in No. 1 Burton, Section 26-20-4e, with total depth at 2,126 feet. The Southern Carbon Co.'s No. 3 Ladell, Section 2-19-4e, is drilling gas rock at 2,130 feet.

C. E. Camette's No. 1 Tugurie, Section 21-22-1e, Union Parish, is shut down at 1,365 feet. In Section 23-20-3e, Interstate Natural Gas Co. has a derrick for No. 1 Parks. Rustin Drilling Co. has cemented 8¼-inch casing at 900 feet in its No. 1 Gulley, Section 16-20-4e. United Carbon Co. is drilling at 2,110 feet in No. 1 Raburn, Section 28-21-4e.

**Webster Parish**

One completion was reported in Webster Parish during the week in Magnolia Petroleum Co.'s 4-A Robbins, Section 21-21-10. It is pumping 80 bbls. from 2,569 feet. The same company's A-2 Robbins, same section, is drilling in chalk rock at 2,329 feet. In Section 22, the Northwest Louisiana Gas Co. is drilling at 1,600 feet. M. E. Davis and others' No. 1 fee, Section 22-22-9, still is waiting orders.

**Union County**

North of Norphlet, Stewart and associates' No. 7 Murphy, Section 9-16-15, was completed in the 2,750-foot sand at 2,756-71 feet flowing 206 bbls. of oil through 2-inch tubing. It was the best completion in the Smackover area and is one of the best wells in sands below the regular producing sands of that field. In the same section, O. G. Murphy's No. 9 T. C. Murphy, was completed as a 5,000,000-foot dry gas well from sand at 2,679-90 feet. South of Kenova, Magnolia Petroleum Co.'s No. 10 Hatfield, Section 7-16-15, was completed in sand at 2,625-30 feet, making 10,000,000 feet of dry gas. Southwest of Griffin, Magnolia Petroleum Co.'s No. 5 Childs, Section 8-16-16, was dry at 3,225 feet; the casing was pulled and the hole abandoned. Northeast of Norphlet, Eason and asso-

(Continued on Page 99)

# DEEP TEST TO TRINITY SAND IN DE SOTO PARISH STAGES BLOW OUT

By James H. Dameron

SHREVEPORT, La., Mar. 21.—Dixie Oil Co.'s mile-deep test on the Jenkins lease, Section 9-12-11, in De Soto Parish, caused a flurry of excitement early in the week when the well blew out from the Trinity horizon at 5,290 feet. The well blew for 20 minutes and bridged and no estimate on the volume of the gas was available. The tools stuck while the bit was pounding through lime and operations are being delayed by a fishing job.

No. 1 Jenkins is about the center of a triangle with oil fields at each corner of the triangle. The Trinity horizon in De Soto Parish is several hundred feet deeper than the same horizon found in Pine Island some 70 miles north.

While Rayville, Carterville and Georgetown were performing encouragingly with tests, the Pleasant Hill area in northern Sabine Parish was coming back to steal some of the thunder from the other areas. Arkansas Fuel Oil Co.'s No. 3 Logan, Section 33-10-12, a west offset to the same company's wildcat producer, No. 1 Logan, is down to testing depth. Sand and shale were cored from 3,101-05 feet and 6⅝-inch casing was cemented at 3,100 feet. No. 4 Logan is drilling hard lime at 2,915 feet and No. 5 is drilling broken lime and gumbo at 3,001 feet. No. 1 Logan did 292 bbls. for the 24-hour period ending Saturday morning. Arkansas company's No. 3 will be tested next week.

**Georgetown Gets Well**

Georgetown came into prominence with a 300-bbl. well flowing clean oil. It is the best completion in that semiwildcat area. Three other tests in that area went off the boards as failures last week and the derricks for four more tests in Grant Parish were abandoned. DeSoto Parish got a semiwildcat producer in Magnolia Petroleum Co.'s No. 1 Mason, Section 28-12-11, which is expected to bring about the drilling of a few more wells in that section.

Arkansas had little to boast of in the way of wildcat developments during the week. Union County is the most active in wildcats in Arkansas and the Lawson area of Union County leads in the work in that county. Ouachita County's deep test in Smackover is being cored at 4,076 feet. The only completion in Arkansas wildcat territory was Shaffer Oil Co.'s geological test in Grant County which was abandoned at 2,278 feet of top of the Palezoic rock.

**Union County**

Garrett & Modisette Drilling Co.'s No. Union Saw Mill Co., Section 7-18-13, cored red gumbo at 3,014 feet. Marine Oil Co.'s No. 2-A Thompson, Section 10-18-13, in the Lawson area, is drilling at 50 feet. Eight and one-quarter inch casing was cemented at 2,676 feet at Marine Oil Co.'s No. 1-B Thompson, Section 10-18-13. Marine company's No. 1-B Winn, Section 10-18-13, is drilling at 2,105 feet; 12½-inch casing was set at 140 feet. Ohio Oil Co.'s No. 1 Cain, Section 1-17-14, is drilling at 2,788 feet. J. W. Oi-

(Continued on Page 126)

# WILDCAT DRILLING OPERATIONS IN EAST CENTRAL TEXAS FIELD

By Special Correspondent

CORSICANA, Tex., Mar. 19.—The status of the wildcat field operations in the East Central Texas Feld, from the latest available information is as follows:

In Cherokee County, the Humble Oil & Refining Co.'s No. 1 Elliott & Clark, Windsor Survey, had sand with a show of oil at 3,847 feet, and the 6⅝-inch pipe was being set. Nicolle & Wife's No. 1 Hill, Dusk Survey, lost a core barrel in the hole and they have been trying to sidetrack it at 2,620 feet. The Magnolia Petroleum Co. was drilling in sandy shale at 4,008 feet in No. 1 Summer, Brewer Survey.

In Falls County, Callahan and others were fishing at 1,236 feet in No. 1 Wilson, Scott Survey.

In Franklin County, Trout and others' No. 1 Gandy (100 acres), Truitt Survey, was drilling at 1,100 feet.

In Freestone County, Kechi Petroleum Co.'s No. 5 Pickens, Prewitt Survey, was shut down at 4,286 feet. J. S. Cosden, Inc., was drilling in lime at 2,980 feet in No. 1 Woods (150 acres), DeCantona Survey. Orbit Oil Co.'s No. 1 Colman, Howard Survey, was shut down at 1,430 feet.

In Hopkins County, Amerada Petroleum Corp.'s No. 1 Jackson & Maloney, Ewing Survey, was drilling in shale at 2,965 feet; top of Pecan Gap at 1,465 feet, base at 1,525 feet.

In Van Zandt County, Cranfill Brothers were rigged up on No. 1 G. W. Foster, Neal Survey.

In Wood County, E. H. Everett & Co.'s No. 1 Consumers Land & Coal Co., Jacob Crawford Survey, was dry at 3,504 feet and will be abandoned.

In Limestone County, C. W. Green and others' No. 1 J. M. Dies, Garrison Survey, pulled the derrick in and it was being rebuilt. The well is at a total depth of 3,412 feet, with Austin chalk at 2,590-3,050 feet. Smith and others' No. 1 Stuberanch, Varella Survey, was drilling at 4,800 feet. Eight and one-quarter inch pipe was set at 3,602 feet. Zoch and others' No. 1 Maddox were drilling at 2,200 feet. Alexander Liles and others' No. 1 Sharp, Varella Survey, had a fishing job at 3,155 feet, top of chalk at 2,500 feet, base at 2,752 feet. McCarty and others are drilling at 1,807 feet in No. 1 Brown, Jackson Survey. Transcontinental Oil Co.'s No. 1 Richardson, Jones Survey, was drilling at 2,790 feet, top of Austin chalk at 2,412 feet, base at 2,752 feet. Alexander Liles and others' No. 1 Strother, McKenzie Survey, was drilling in shale at 2,040 feet. Shaffer and others' No. 1 Oliver, Carilla Survey, was shut down at 100 feet. Pandem Oil Corp.'s No. 1 Fenner, Roskine Survey, set 8¼-inch pipe at 2,887 feet and was drilling at 2,904 feet, top of chalk at 3,125 feet, base at 3,500 feet. Diller & Hammond's No. 1 Fenner, Roskins Survey, shut down after drilling to 2,904 feet; same operators were shut down at 4,035 feet in No. 1 Jones, Flippen Survey.

In Navarro County, The Texas Company's No. 1-B Brown Chaney, John White upper survey, was at a depth of 3,028 feet. There was a show of oil at 2,962 feet. The Sun Oil Co.'s No. 3 Swink, Boren Survey, had reached a depth of 5,410 feet with the hole caved in. Rotary was being rigged up. There was a showing of oil in lime at 4,834 and at 5,182 feet. Reiter and others' No. 1 Stubbs, Boren Survey, was drilling in shale at 3,010 feet, top of chalk at 2,212 feet, base at 2,608 feet. The Magnolia Petroleum Co.'s No. 1 Marshall, Chambers Survey, was drilling in lime at 3,665 feet.

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# Oil in Deep Test in Oregon Basin

## Deep Test in Utah to Be Drilled Deeper. Drilling Campaign in Extensions of Sunburst

By Frank B. Taylor
*Staff Correspondent, Rocky Mountain Area*

CASPER, Wyo., Mar. 19.—Heavy snows at the close of the week closed the roads and the passes over the mountains and seriously interfered with the traffic to and from the oil fields, in Montana and Wyoming.

The pipe for the new gas line from the Buffalo Basin Field to a connection with the present distribution system in the Big Horn Basin is all strung and while the storm may interfere with the ditching to some extent, that part of the work is started and will be pushed rapidly.

South of the Bolton Creek Field, and close to the south boundary of Natrona County, the Foreman wildcat being drilled by the Foreman Syndicate on the Grebeal Dome is at 3,375 feet and drilling after being shut down during the winter.

The Foreman Oil Co. drilled a deep test near Lingle, Goshen County, in eastern Wyoming, and shut down last year at a depth of 5,500 feet. This well is also to be started drilling again shortly.

In the Big Muddy Field, the Continental Oil Co. is completing two new producers on Section 9-33-76, in the second Wall Creek sand. These two wells will make producers, but have not yet been finished. They are Nos. 39 and 42 on the Humphrey lease.

### Elk Basin Showing

On the south end of the Elk Basin Field, Park County, the Henderson Oil Co. is drilling into the Frontier sand and the well is showing oil and some gas. The location is on Section 5-57-97.

In Wyoming, Oregon Basin and La Barge are the only spots that will see much activity and Colorado has two spots also, the new area in the southeastern part of the State and the Walden Pool. Many wildcatters expect to continue their efforts in spite of the low price of crude in the producing fields.

In the Oregon Basin in Park County, Wyoming, the Ohio Oil Co.'s deep test reached a depth of 3,540 feet with the hole full of oil from the Embar sand and then lost the tools. The fishing job is not considered a bad one and the tools should be out again in a few days. The well flowed when agitated and the oil in the hole is bothering the crew somewhat in the fishing job. The well is thought to be on top of the Tensleep sand where farther black oil production is expected.

The Producers & Refiners Corp. is becoming interested in the Oregon Basin. A deal was concluded the past week whereby this company, which is the operating subsidiary of the Prairie interests in this State, paid $25,000 for four permits and also agreed to give the former owners a royalty in case the land is found productive. The tracts are known as the Frisby, Hand, Atherly and Rue permits and the Producers & Refiners Corp. plans to start drilling at once looking to the development of the land.

### Salt Creek Completions

The Salt Creek Field completed four new Lakota wells, all by the Midwest Refining Co. and its subsidiary firms. The Midwest Oil Co. brought in a good well on Section 2-39-79 that found Lakota production at 2,504 feet and pumped 183 bbls. on a test run. The Wyoming Associated Oil Co. found a Lakota sand producer at 2,464 feet on Section 26-40-79, that started off a gusher and made 3,601 bbls. the first 24 hours. The same company also found another Lakota producer on Section 23-40-79, at 2,504 feet, bbls. and is the best completion of the month so far. All of the Lakota completions were shut in after a test of production was made.

The Wyoming Oil Fields Co. completed a Lakota producer on Section 26-40-79 at 2,398 feet that started off at 3,902 which made 118 bbls. on the pump for a test.

The Midwest Oil Co. completed a small pumper on Section 26-40-79, at 1,150 feet but the well did not make any flow and is rather small. Another of the same kind was completed by the Wyoming Associated Oil Co. on Section 23-40-79, at 1,105 feet.

### Deep Test in Utah

In Utah the deep test discovery well on the Cane Creek Dome, south of Moab, failed to show commercial oil or gas at 4,976 feet as was expected and it is now drilling deeper. The Snowden & McSweeney test, on the same structure is at 780 feet, and drilling in the big hole. The John Shafer well, on the Shafer Dome, 5 miles south of the Cane Creek, is setting a string of 6¼-inch casing at 5,274 feet. On the Elk Ridge structure, where the Midwest Refining Co. has a wildcat drilling, the 12½-inch pipe is in place and tight and the tools are drilling at 1,250 feet.

### Colorado Operations

A report from Trinidad, Colo., states that the Model Oil Co., drilling a wildcat 30 miles northeast of Trinidad, struck a showing of oil and gas that appears to be commercial. But little information could be had at present, but a test is to be made the first of the week.

The wildcat of the Repollo Oil Co., drilling near Boulder, Colo., is at 4,300 feet and making hole slowly. In the Rangeley Field, the report from the Tide Water Associated well, which was reported last week as showing for a well, is that the test of the hole cannot be made until the casing is reset and cemented to shut off water. The Texas Production Co.'s well at Rangeley, on Section 30-2-102, is shut down making repairs to the machinery and is not expected to be drilling before next week.

In the Walden Field, the Continental Oil Co. is on the beam with the second test there, after spudding in. The discovery well is making production through a partly closed gate, of about 400 bbls.

The Marland well that was reported a gasser found the Dakota full of water and as the gas found in the shale had exhausted itself, the well is to be abandoned. This location is on the Iles Dome in Moffat County.

### Sunburst Drilling Plans

Last year, a syndicate from Idaho, with some Montana capital drilled a well north of Cut Bank, in Glacier County, which found gas in the Ellis sand. The well was known as the Sand Point Syndicate's well, but before the area could be tested by another well, fall came and the cold weather determined the operators to shut down until this spring.

Preparations are now being made to drill two more wells this spring on the Berger ranch where the discovery well is located about 10 miles north of Cut Bank, a town on the Great Northern Railroad and a gas line is proposed to carry the gas to Cut Bank and supply that place with gas for fuel.

This well is about 15 miles west of the Sunburst Field and as the gas was found in the main producing horizon of the oil field, the area is looked upon as a possible new oil area for northern Montana.

The Prairie Oil & Gas Co. is reported to be sending in a rig for a wildcat well on Section 13-33-2, on the Hunter lease near Galata. This territory lies about 20 miles east of the Sunburst Field so drilling is expected to be active this summer on both the east and west sides of the field in an effort to find another pool.

The central part of the Sunburst Field is attracting attention since several good wells have come in on Section 28-35-2. Five new wells were started on that section the past week and only six others were commenced in other parts of the field. The fact that Sunburst Field did not share in the general reduction of crude has stimulated the operators to drill wells this spring. The latest completion on this section is the well of the California Petroleum Co.'s No. 5 on the Lorensen ranch which is making 200 bbls.

Another good completion was made by the Ski-U-Mah Oil Co., on Section 33-35-1, which started off with a test run of 36 bbls. per hour from the Ellis sand at 1,445 feet and then made 250 bbls. steadily. On Section 22-35-1, the Kalispell Syndicate found a commercial well in the stray sand above the Ellis and will produce from same. The well is estimated at 40 bbls.

The Continental Oil Co.'s test, on the Clayton lease, Section 14-15-29, in the Cat Creek Field, failed to find production in the Kootenai sands and found a water sand at 1,618 feet. The well will be saved for a water supply.

A wildcat is to be drilled at once on a block of leases north of Lewistown, Fergus County, by J. W. Rose and others. The first well is to be drilled on Section 20-16-18.

A deep wildcat is being drilled on the Canadian side of the border, near Coutts. The well is expected to go to the Turner Valley sands, but is at present about 3,400 feet. The Turner Valley sands lie at about 5,200 feet under the Coutts vicinity.

**Runs From the Fields**

| | |
|---|---|
| Elk Basin | 790 |
| Greybull | 20 |
| Rock River | 2,990 |
| Rex Lake | 210 |

(Continued on Page 100)

# TURNER VALLEY PRICE FIXED; OUTPUT APPROXIMATES 800 BBLS.

By Victor Lauriston
*Staff Correspondent, Canadian Fields*

CHATHAM, Ont., Mar. 19.—In the Turner Valley Field, southwest of Calgary, Imperial Oil, Ltd., has fixed a net price of $4 per barrel at the well head for 72 gravity crude naphtha. The first production was marketed on a tentative basis of $4.72½, but early in the present year it was reported the figure would be reduced to around $3. The new price of $4 appears to be generally acceptable to the producers. It is understood that the $4 rate is to hold good till the end of 1927, and may be increased if the retail price of gasoline goes higher than the present figure. The new price applies alike to the Royalite Oil Co., the Imperial Oil, Ltd., producing subsidiary in the Turner Valley Field, and the various independent producers.

At present, the apparent production of crude naphtha of 72 degrees or better in the Turner Valley Field approximates 800 bbls. Royalite Oil Co.'s No. 4 made 18,740 bbls. in January, or about 604 bbls. a day; and the average for 1926 was around 550 bbls. Illinois-Alberta Oil & Refining Co.'s No. 1 is making around 125 bbls. a day, and Vulcan Oil's No. 1 is making up to 140 bbls. a day. McLeod Oil Co.'s No. 2, at last reports, was not yet back on production, but the wet gas flow indicated, it is claimed, a potential production of 80 to 100 bbls. a day. Excluding this, the average daily production may be placed at 815 bbls., with a possible peak production of 850 bbls. In addition to this, the New McDougall-Segur No. 1 has an estimated production of 100 to 120 bbls. a day of 55 Baume crude from the Dakota sand, which production falls in a different category from the 72-degree crude naphtha of the Madison limestone producers.

### Bow Island Field

In the Bow Island Field, Imperial Oil, Ltd., Burdett No. 1, Section 8-11-11w4, is reported drilling at 3,623 feet. At this depth the test is stated to be through the lime formation and working 21 feet in a shale formation. The Imperial-Burdett got this lime at 2,900 feet, so that the lime formation is 702 feet thick. Whether the limestone formation in the Imperial-Burdett corresponds to the Madison limestone of the Turner Valley Field has not been determined; but if it does, this is the first well in Alberta to be drilled through the limestone into the underlying shale formation. Drilling will be continued.

On the Quarantine Reserve, near Coutts, the Urban Oils, Section 4-1-15w4, is shut down temporarily at 3,410 feet. At this depth the test is reported to have passed through 36 feet of potential oil sands, and is now in the brown shales of the Upper Devonian. The drill got the brown shale at 3,409 feet. The oil showings were in 36 feet of a very tight formation, and with a lot of water in the hole bailed about 1½ bbls. of oil per day. Efforts are being made to cement off this water, which is leaking in above the oil sand, after which the cement plug will be drilled out and a swabbing test made. A shot may be tried in the oil sand.

In the Medicine Hat Field, Roth Syndicate's No. 2 deep test, Section 17-13-6w4, in the Redcliffe area, is reported drilling around 2,700 feet. Arrangements are being completed for the city of Medicine Hat to take over Roth No. 1 test at a price of $78,000, being the cost of drilling. Roth No. 1 was started under arrangement between the Roth Syndicate and the city of Medicine Hat, the syndicate agreeing to make a deep test for oil and pay a royalty on any oil production secured, the municipality to take over the test if it finished a gasser. Gas was struck in several sands, but in the lower horizons no oil production was secured, and owing to water troubles the deep drilling was discontinued after reaching the stipulated depth, and the well finished as a gasser. Roth No. 2 is being drilled somewhat higher on the structure.

### Lethbridge Land

In the Lethbridge Land district, southern Alberta, A. G. Clarke of Calgary has filed on 1,800 acres on the Milk River structure in behalf of the Alberta Pacific Consolidated, Ltd., of Calgary. This acreage will, it is reported, be tested

(Continued on Page 131)

# Seal Beach Big Factor in California

## Activity There Exceeds That Seen in Any Other Area for Long Time. Operators Expect Crude Price Reductions

By L. P. Stockman
*Staff Correspondent, California Fields*

LOS ANGELES, Calif., Mar. 19.—The most important situation confronting the industry today is the ever-increasing production of crude oil and, while it looks as though this flood will continue for some time, California operators should be able to handle the local situation in good shape, provided, of course, they can continue disposing of part of the surplus in intercoastal and export trade. Considerable difficulty has been experienced by marketers during the past several months in securing adequate bottoms and from present indications shippers cannot anticipate any relief within six months as the present tanker shortage should continue for at least that period. It is thought, however, that California shipments will continue along about the same rate and these liftings will tend to help matters somewhat. The outlook from a production standpoint, while it is distinctly threatening, should not cause the industry undue alarm for California operators have never yet dodged a legitimate issue and it is a foregone conclusion that the so-called impending production crisis will be satisfactorily coped with.

One feature in connection with the anticipated upward swing in California production was the failure of the Julian Petroleum Co. to open a new field at Potrero where the Associated Oil Co. has a wildcat standing suspended in an untested oil sand. The Julian interests intend swinging northward and, while they might secure production in that direction, it will be another three or four months before a new well could reach the oil sand in any event. The shifting of operations north of the Associated's wildcat will also relieve matters a little as the town lot section in that direction is fairly well tied up in large blocks and this will result in the drilling of fewer wells than would have been done if the field extended southward.

### Seal Beach Big Factor

Seal Beach is the field which is expected to upset the apple cart during the next several months but those who are of a pessimistic frame of mind should recall the town lot development at Long Beach and more recently the intensive development work undertaken at Huntington, as the town lot area at Seal Beach will probably be a repetition of conditions at Huntington Beach. It should register a rapid climb but will probably only maintain its peak production for a limited time as it is axiomatic that no intensely-drilled field can hold up for more than a short period following the well completion peak. Seal Beach alone holds the key to the future and, while the town lot section of this field is expected to boost the state production up pretty close to the 700,000-bbl. mark, it is hardly likely that the peak will be maintained for more than a limited time. If wildcatters at Potrero can hold off for several months and thus preclude the opening up of another new field at that point, everything will be hotsy totsy.

### Expect Price Cut

It is the general consensus of opinion that California crude oil prices will be cut in sympathy with the recent reductions made east of the Rockies and, while this drop has been anticipated for some time due to an upward swing of the production curve, operators are not in accord as to how drastic the cut will be nor are they of the same opinion with respect to the kind of oil which will be slashed. It is a foregone conclusion that the lighter grades will be reduced quite severely but due to the existing low prices prevailing for low-grade crude oil some are inclined to believe that this type will escape with only a general trimming here and there. With the state storage of heavy crude and fuel oil consistently accumulating from month to month, however, it would seem logical to expect a severe cut in the heavy nonrefining grades of oil along with the reduction in light crude. This would undoubtedly result in the shutting in of some additional heavy oil production particularly in those fields where present prices just about offset the lifting costs. These operators would probably be obliged to shut down as they could not continue to operate at a loss indefinitely and, while this additional curtailment might be advantageous to the producer of light oil, it would react unfavorably to the marketers of fuel oil as this commodity would also reflect the drop in price of heavy crude. Prices of California crude and refined oils are all out of proportion and because of this disparity it would not be at all surprising if the entire price schedule were revised.

**IMPORTANT SOUTHERN CALIFORNIA WILDCATS**

| Company, Well and Location— | S-T-R | Depth | Status |
|---|---|---|---|
| Smith Pet. Co., No. 1 Johnson, Hawthorne | 17- 3-14 | 5,850 | gr. sd. drilling |
| General Pet., No. 1 Smith, Potrero | 35- 2-14 | 4,150 | sd. sh. drilling |
| General Pet., No. 1 Guiberson, Potrero | 35- 2-14 | Rig | wait. devel. |
| Julian Pet., No. 1 Smith, Potrero | 35- 2-14 | 5,102 | gr. sd. drilling |
| Julian Pet., No. 1 DeKoch, Potrero | 35- 2-14 | Rig | rigging up |
| Associated, No. 1 Cypress, Potrero | 34- 2-14 | 4,450 | cmtd. oil sand |
| Getty, Geo. F., No. 1 Cypress, Potrero | 35- 2-14 | Rig | wait. devel. |
| Getty, Geo. F., No. 2 Cypress, Potrero | 34- 2-14 | Rig | abandoning |
| Getty, Paul, No. 1 Cypress, Potrero | 35- 2-14 | Rig | wait. devel. |
| California Pet., No. 1 Sutton, Potrero | 34- 2-14 | Rig | wait. devel. |
| California Pet., No. 1 Toms, Potrero | 35- 2-14 | Rig | wait. devel. |
| California Pet., No. 1 Armour, Potrero | 35- 2-14 | Rig | wait. devel. |
| Cole, Fred E., No. 1 Cypress, Potrero | 35- 2-14 | Rig | wait. devel. |
| Dill Oil Co., No. 1 Cypress, Potrero | 35- 2-14 | Rig | wait. devel. |
| Walker, Fred, No. 1 Cypress, Potrero | 35- 2-14 | Rig | wait. devel. |
| Potrero Oil Co., No. 1 Cypress, Potrero | 35- 2-14 | Rig | wait. devel. |
| Dominguez Exten., No. 1 Compton, Dominguez | 22- 3-13 | 5,111 | sd. sh. drilling |
| Circle Oil Co., No. 1 Pomeroy, Manchester | 22- 3-14 | 3,358 | suspended |
| Cardiff Oil Co., No. 1 Oceanside, San Diego | 24-13- 4 | 2,176 | sd. sh. drilling |
| Standard, No. 1 University, San Fernando | 15- 2-15 | 5,625 | hd. sd. drilling |
| Standard, No. 1 Austin, Topango | 11- 1-17 | 2,380 | hd. sd. drilling |
| E. J. Robinson, No. 1 A. P. K., San Juan Capistrano | 13- 8- 8 | 2,414 | gas show |
| Oceanside Oil Co., No. 1 Pacific, San Diego | 23-11- 5 | 3,210 | suspended |
| Sou. Calif. Drlg. Co., No. 1 Matteson, El Segundo | 1- 3-15 | 4,400 | suspended |
| Petroleum Sec., No. 1 Weston, El Segundo | 27- 4-14 | 305 | sd. drilling |
| Calif. Pet. Dev., No. 1 Spitz, Capistrano | 2- 8- 8 | 4,000 | idle—rain |
| Petroleum Sec., No. 1 DeBaker, Bandini | 18- 2-12 | 5,440 | br. sh. drilling |
| Union, No. 1 Moser, Athens | 12- 3-14 | 5,605 | hd. sd. drilling |
| General Pet., No. 1 Lomita, Sunset Beach | 19- 5-11 | 4,490 | hd. sd. drilling |
| Johnson, Geo. W., No. 1 Wickham, Los Angeles Co. | 32- 5-17 | 2,828 | test. show. |
| Rider, E. R., No. 1 El Segundo, Los Angeles Co. | 12- 3-15 | 2,300 | suspended |
| Clearwater Pet., Well No. 1, Los Angeles Co. | 16- 3-12 | 1,450 | suspended |
| Green, H. M., No. 1 Structure Hole, Los Angeles Co. | 27- 1-13 | 1,400 | suspended |
| Ackers, C. F., No. 1 Downey, Los Angeles Co. | 10- 3-12 | 340 | set pipe |

**IMPORTANT NORTHERN CALIFORNIA WILDCATS**

| | | | |
|---|---|---|---|
| Associated, No. 1 Smith, Kettleman Hills | 12-23-18 | 2,043 | rig. rot. |
| Bolsa Chica, Well No. 1 Kettleman Hills | 30-23-19 | 3,365 | suspended |
| General Pet., No. 1 Burbank, Kettleman Hills | 30-23-19 | 2,950 | fair showing |
| General Pet., No. 1 Dome, Kettleman Hills | 26-22-18 | ..... | location |
| C. C. M. O., No. 1 McGlashan, Kettleman Hills | 17-24-19 | Rig | rigging up |
| South Coalinga, Well No. 1 Kettleman Hills | 35-24-19 | 2,150 | bl. sh. drilling |
| Ahlburg Gas Co., Well No. 1, Kettleman Hills | 7-23-23 | Rig | rigging up |
| Milham Explth., No. 1 Kettleman, Kings Co. | 2-22-17 | Rig | rigging up |
| Shell, No. 2 Berlywood, Moorpark | 32- 3-20 | 2,230 | hd. sd. drilling |
| California Pet., No. 1 Camarillo, Ventura Co. | 21- 2-20 | 1,360 | hd. sd. drilling |
| C. C. M. O., No. 1 Hobson, Ventura Co. | 22- 3-24 | 5,855 | cmt. fish |
| C. C. M. O., No. 1-B Hobson, Ventura Co. | 16- 3-24 | 3,000 | bl. sh. drilling |
| Milham Explth., No. 1 Sexton, Ventura Co. | 19- 3-22 | 7,100 | fishing |
| Standard, No. 1 Camarillo, Ventura Co. | 29- 2-20 | 4,950 | fishing |
| Standard, No. 1 Montalvo, Ventura Co. | 17- 2-22 | 4,420 | gr. sd. drilling |
| Petroleum Sec., No. 1 Diablo, Ventura Co. | 4- 4-18 | 1,320 | idle—rain |
| Miley Explth., No. 2-A Casitas, Ventura Co. | 7- 3-25 | 550 | idle—rain |
| Rio Grande, No. 1 Canet, Ventura Co. | 9- 3-23 | 4,320 | sd. sh. drilling |
| Parkford, E. A., No. 1 Strathern, Ventura Co. | 5- 2-18 | 2,174 | sd. sh. drilling |
| Star Petroleum, No. 1 Canet, Ventura Co. | 13- 3-23 | 3,215 | hd. sd. drilling |
| Richfield, No. 1 Janes, Ventura Co. | 16- 5-18 | 1,640 | idle—rain |
| Richfield, No. 27 Piru, Ventura Co. | 35- 5-18 | 1,480 | idle—rain |
| Superior, No. 1 Pena, Ventura Co. | 18- 4-17 | 2,998 | sd. sh. drilling |
| Milham Explth., No. 2 Buttonwillow, Kern Co. | 8-22-23 | 3,988 | reaming |
| Milham Explth., No. 3 Buttonwillow, Kern Co. | 7-29-24 | ..... | location |
| Pacific Eastern, No. 1 Bakersfield, Kern Co. | 6-30-28 | 3,650 | hd. sd. drilling |
| C. C. M. O., No. 1 Quinn, Delano | 23-25-27 | Rig | rigging up |
| Union, No. 1 Gill, Famosa | 8-28-27 | 3,281 | gr. sd. drilling |
| Union, No. 1 Colm, Kern Co. | 24-28-20 | 850 | bl. sh. drilling |
| Marland, No. 1 Jacalitos, Fresno Co. | 22-21-15 | 3,750 | br. sh. drilling |
| Petroleum Sec., No. 1 Aniotz, Monterey Co. | 2-22- 9 | 1,710 | Serpentine |
| Petroleum Sec., No. 1 Sandy, Monterey Co. | 18-27-13 | ..... | location |
| Ozena, No. 1 Allensworth, Tulare Co. | 26-24-24 | 1,770 | fishing |
| Grafford, C. W., Well No. 1, Tulare Co. | 26-24-24 | 2,520 | hd. sd. drilling |
| Walkin Pet., No. Emerick, San Luis Obispo Co. | 35-27-10 | 2,470 | redrilling |
| Richfield, No. 1 Wreden, San Luis Obispo Co. | 10-29-17 | Rig | suspended |
| Shell, No. 1 Cowell, San Mateo Co. | 16- 5- 5 | 1,725 | hd. sd. drilling |
| Shell, No. 1 Murphy, Petaluma | 29- 5- 6 | 4,630 | hd. sd. drilling |
| Talbot Oil Co., Well No. 1, Alameda Co. | 15- 3- 3 | 470 | sd. sh. drilling |

**TANKER SHIPMENTS FROM LOS ANGELES TO ATLANTIC AND GULF COAST PORTS**

| Commodity— | Total This week | Daily Average | Total Last week | Daily Average | This year To date | Same time Last year |
|---|---|---|---|---|---|---|
| Crude oil | 217,500 | 31,071 | 167,338 | 23,905 | 1,547,431 | 2,782,886 |
| Fuel oil | 170,004 | 24,283 | 334,273 | 47,753 | 1,845,308 | 1,468,850 |
| Diesel and gas oil | 272,568 | 38,937 | 76,655 | 10,951 | 867,233 | 390,858 |
| Gasoline | ..... | ..... | 77,113 | 11,016 | 1,583,291 | 1,180,069 |
| Tops | ..... | ..... | ..... | ..... | ..... | 149,906 |
| Coastwise— | | | | | | |
| Crude oil | 533,221 | 76,174 | 380,041 | 54,292 | 5,219,537 | 4,902,851 |
| Fuel oil | 278,863 | 39,838 | 282,461 | 40,352 | 2,751,065 | 1,700,444 |
| Diesel and gas oil | ..... | ..... | 26,358 | 3,765 | 46,932 | 82,854 |
| Gasoline | 156,296 | 22,328 | 127,844 | 18,263 | 1,698,167 | 1,322,789 |
| Kerosene | ..... | ..... | 4,072 | 582 | 35,738 | 40,888 |
| Tops | ..... | ..... | ..... | ..... | ..... | 65,145 |
| Exports— | | | | | | |
| Crude oil | 68,566 | 9,795 | 168,658 | 24,094 | 727,007 | 651,498 |
| Fuel oil | 640,051 | 91,436 | 665,863 | 95,123 | 5,367,680 | 3,484,436 |
| Diesel and gas oil | 60,861 | 8,409 | ..... | ..... | 144,767 | 103,899 |
| Gasoline | 206,677 | 29,525 | 7,540 | 1,077 | 302,476 | 675,377 |
| Kerosene | 65,477 | 9,354 | 79,486 | 11,355 | 426,632 | 475,520 |

**TANKER SHIPMENTS FROM SAN FRANCISCO TO ATLANTIC, GULF COAST PORTS**

| | | | | | | |
|---|---|---|---|---|---|---|
| Diesel and gas oil | ..... | ..... | ..... | ..... | 251,458 | 339,488 |
| Gasoline | ..... | ..... | 335,009 | 47,858 | 807,916 | 267,717 |
| Lubricants | ..... | ..... | ..... | ..... | 58,110 | 62,025 |
| Coastwise— | | | | | | |
| Fuel oil | ..... | ..... | 93,915 | 13,416 | 1,037,257 | 1,217,751 |
| Diesel and gas oil | ..... | ..... | ..... | ..... | 134,308 | ..... |
| Gasoline | 184,101 | 26,300 | 232,367 | 33,195 | 955,743 | 814,713 |
| Kerosene | 13,753 | 1,965 | 4,780 | 683 | 25,886 | 67,068 |
| Exports— | | | | | | |
| Fuel oil | ..... | ..... | 73,809 | 10,544 | 295,851 | 506,941 |
| Gasoline | 260,076 | 37,154 | ..... | ..... | 858,046 | 402,462 |
| Kerosene | ..... | ..... | ..... | ..... | 209,304 | 332,588 |
| Lubricants | ..... | ..... | ..... | ..... | 9,120 | 9,093 |
| Diesel and gas oil | 272,858 | 38,937 | 36,655 | 10,951 | 867,233 | 390,858 |

### Seal Beach

The electorate of Long Beach decided several days ago by a vote of 12,313 to 9,075 that that portion of the Seal Beach Field which lay within the corporate limits of that municipaltiy would be restricted against the drill and hence all that territory lying south of the railroad tracks, including the subdivision at Naples, "just ain't" as far as any future potential development program is concerned. The wrecking of beautiful Los Cerritos when the so-called town lot or northwest extension of the Long Beach Field was opened up precluded any thought of a favorable vote with respect to development work in the Naples subdivision and hence the outcome did not come as a surprise. Action of the voters brought to an end a fight that for bitterness has exceeded any civic dispute in the history of Long Beach. And with the election over operators can now dismiss from their minds any ideas they might have been entertaining of drilling in the town lot area south of the Marland's Selover property in the older section of the field. The outcome of this election does not affect work in the town lot area at Alamitos Heights now under development as this section came into the city of Long Beach with the stipulation that it would not be restricted against the drill.

It is doubtful if any town lot area or other intensely-drilled section in the United States has ever gotten under way as quickly as the town lot section at Seal Beach for materials appear from nowhere and the derricks seem to fall out of the air and take shape. The fact that Seal Beach is probably establishing a new record for rapidity of work is due, of course, to the action of the City Council in holding up development work for several weeks pending the enactment of regulative legislation. Operators during this period, while prohibited from drilling because of restrictions subsequently lifted, hauled in rig material and assembled other necessary equipment so that no time would be lost following the granting of permission by the City Council to proceed with work. It is utterly impossible to describe the mad rush which is under way but if one will visualize the start of an important horse race with the mounts prancing back and forth, some idea can be gained of the attitude of the operators in the town lot section at Seal Beach during the two or three weeks just previous to the lifting of restrictions which prohibited work in that area. And just as the horses in a race get away together so also did some 65 or 70 operators in the town lot section at Seal Beach get off to a flying start and along about the end of April or early in May these early starters will be in the home stretch.

### Intensive Activity

Most of the work now being done in the town lot or Alamitos Heights section

(Continued on Page 127)

# WELDED STEEL TUBULAR PRODUCTS

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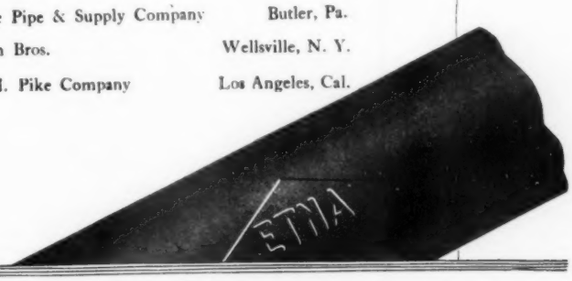
| Southwest Supply Company | Bartlesville, Okla. |
| Superior Tube Company | Tulsa, Okla. |
| Atlas Supply Company | Muskogee, Okla. |
| Hercules Supply Company | Dallas, Texas |
| Keystone Pipe & Supply Company | Butler, Pa. |
| McEwen Bros. | Wellsville, N. Y. |
| Thos. H. Pike Company | Los Angeles, Cal. |

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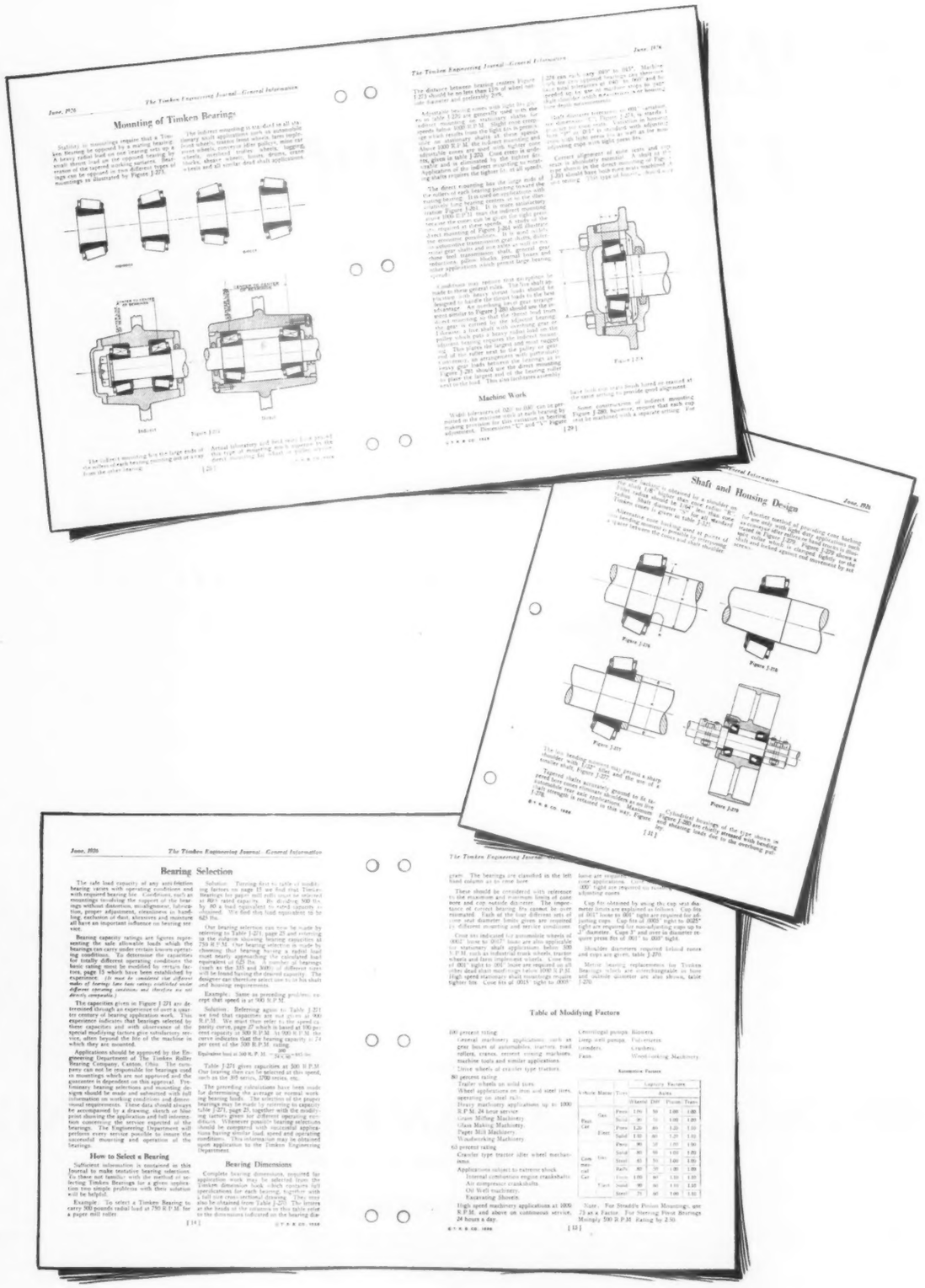

June, 1926 The Timken Engineering Journal—General Information

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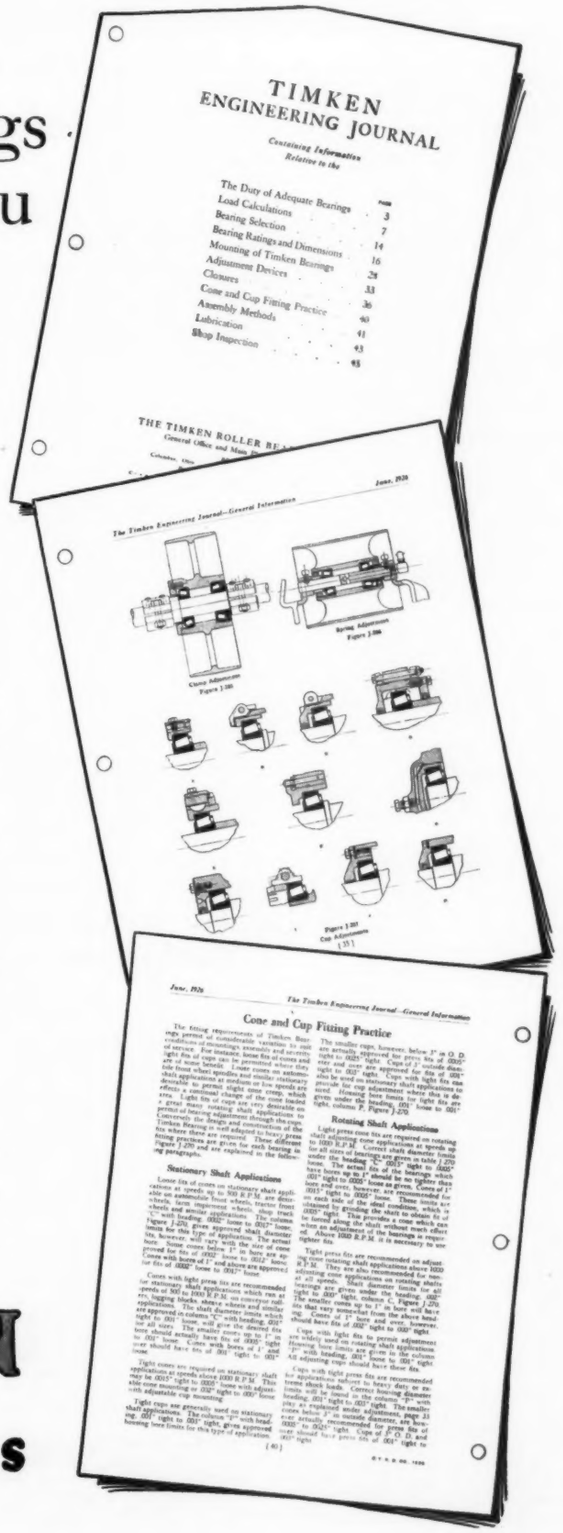


# Holmes County Has 260-Barrel Well

## Empire Gas & Fuel Co. Gets Good Producer in Clinton Sand, Monroe Township, Holmes County

By D. S. Wakenight
*Staff Correspondent, Eastern Fields*

PITTSBURGH, Pa., March 21.—Keeping the old wells producing to their full limit is at this time receiving more attention than starting new work. If many are shut down they will be a long time coming back, possibly permanently ruined. When conditions improve, operators will be as much at loss to know where to drill for strictly new producing territory as at any time in the past five years. The prospects for finding it are very small, so much territory having been tested and found barren of either oil or gas.

**Southeast Ohio**

The Southeast Ohio deep-sand territory, after a long run of light wells, has again come to the front with a good producer, located in Lot 6, Monroe Township, Holmes County, the first well of appreciable size completed in a number of weeks. It is the Empire Gas & Fuel Co.'s second test on the Oscar Steele farm. It produced 260 bbls. the first 24 hours after drilled through and shot in the Clinton sand.

In the southeast quarter of Section 4, Bowling Green Township, Licking County, O. W. Zeink and others have completed a test on the Homer Cooperrider farm. It is a very light pumper in the Berea grit. In the northwest quarter of Section 12, Washington Township, Belmont County, the Natural Gas Co. of West Virginia completed in the same formation a second test on the Silas Durig farm. It produced 45 bbls. the first 24 hours after shot.

In Section 3, Franklin Township, Licking County, Moore & Adams are drilling on the Mary E. Wolfe farm. In the same township, Smith & Hazlett are drilling another test on the D. E. Dusthimer farm. In Section 9, Westland Township, Guernsey County, the Ohio Fuel Supply Co. is due in the sand on the Samuel Smeltzer farm.

**Meigs County**

In the northern part of Lot 289, Sutton Township, Meigs County, the Ohio Fuel Supply Co. has started to drill a test on the A. S. Rasp farm. In Section 20, Harrison Township, Perry County, William Cline & Co. have a rig up on the J. L. Bennett farm. In Section 18, Starr Township, Hocking County, Frank Linton and others are drilling on the Lewis Ruble farm. In York Township, Athens County, the Glendale Oil Co. is drilling on the Lick Run Coal & Clay Co.'s property. In Falls Gore Township, Hocking County, the Griffin Producing Co. has a rig up on the Robert Tinker farm.

In the northeast quarter of Section 19, Reading Township, Perry County, the Hope Construction & Refining Co. has completed in the Clinton sand a test on the Margaret E. Barnes farm. It is a near duster, not good for more than 1 or 2 bbls. a day.

In Liberty Township, Section 19, Washington County, Charles L. Erb and others have completed in the second Cow Run sand, and dry. In Section 3, Grandview Township, the Morris Oil Co.'s second test on the J. K. Morris farm is a duster. In Section 13, Washington Township, Belmont County, the Natural Gas Co. of West Virginia is drilling a second test on the Silas Durig farm.

In Section 16, Hardy Township, Holmes County, Burton Lorgan & Co. have completed and shot in the Clinton sand a second test on the George Schuler farm. It produced 60 bbls. the first 24 hours. In the northwest quarter of Section 10, Fallsbury Township, Licking County, Poulton Brothers, Brown & Co. completed in the Berea grit a test on the Charles Fisk farm good for 15 bbls. a day.

**Southwest Pennsylvania**

In Richhill Township, Greene County, the Manufacturers Light & Heat Co. has a gasser in the Gordon sand at a test on the Albert and Viola Lyons farm. In Gilmore Township, the same company's test on the D. K. Phillips farm is a gasser in the Big Injun sand.

In Gilmore Township, Greene County, the Manufacturers Light & Heat Co. has completed in all sands No. 3 on the Irvin White farm. It has been abandoned and the hole plugged.

**West Virginia**

The best well of the week in West Virginia is the Maxon Oil Co.'s No. 3 on the A. W. Whistler farm, in Battelle district, Monongalia County, estimated good for 20 bbls. a day. It got its production in the 30-foot sand.

In Center district, Wetzel County, the Carnegie Natural Gas Co.'s No. 3 on the Rufus Long farm, drilled down, is a gasser in the Gordon sand. In Liberty district, Marshall County, L. F. Burley & Co. have a light show of oil in the same formation as a test on the Adam Phillips farm. In Ten Mile district, Harrison County, the Hope Natural Gas Co. has a fifth sand gasser at a test on the T. M. Sullivan farm.

In Jefferson district, Lincoln County, the Columbia Gas & Electric Co. has a gasser in the Berea grit at No. 432 on the L. R. Sweetland farm.

**Roane County**

In Walton district, Roane County, the United Fuel Gas Co.'s test on the John Cromwell farm is a gasser in the Big Injun sand. In Geary district, the Elkins Oil & Gas Co. has a gasser in the Squaw sand on the W. M. Smith farm. In Reedy district, the Heck Oil Co. drilled deeper and shot in the Berea grit an old well on the E. T. McVey farm. It is good for 10 bbls. a day in the Berea grit. In Harper district, Simms & Co. have a duster in the salt sand at a test on the S. M. Curry farm and shut down for orders. In Walton district, the King Oil & Gas Co. has a duster in the Berea grit at a test on the Alexander White farm. They are undecided as to going deeper. In Geary district the Elkins Oil & Gas Co. has a gasser in the Squaw sand at a test on the Daniel Saylers farm.

**Good Gasser in Tyler County**

In Union district, Tyler County, the American Oil Development Co.'s No. 4 on the M. Cornell farm is a 4,000,000-foot gasser in the Keener sand.

In Mannington district, Marion County, the Hope Construction & Refining Co. has drilled down to the Gordon sand No. 1 on the E. S. Evans heirs' farm, and is a gasser. In Troy district, Gilmer County, the same company's test on the H. I. Alleman farm is a gasser in the Maxon sand.

In New Milton district, Doddridge County, the Manufacturers Light & Heat Co. is skidding the rig at a test on the Henry Ahouse farm, and will start a new hole. In Mannington district, Marion County, the Carnegie Natural Gas Co. is fishing at 3,007 feet on the Isaac Hibbs farm. The same company is drilling at 1,700 feet on the J. L. Arnett farm. In the same district, C. E. Morris has shut down at 2,200 feet on the Riley Arnett farm.

In New Milton district, Doddridge County, G. B. Travis completed in the Big Injun sand his test on the L. W. Robinson farm. It is estimated good for 8 bbls. a day. On the headwaters of Slick Branch Run of Breeden Creek, Harvey district, Mingo County, the Public Gas Corp.'s No. 13 on the Closterman estate is a duster in the Maxon sand.

In Grant district, Harrison County, the Hope Construction & Refining Co. has drilled its test on the Sullivan farm through the Speechley sand, and it is a small gasser in this and the fifth sand.

In Henry district, Clay County, West Virginia, the Virginian Gasoline & Oil Co. has completed in the Big Injun sand No. 19 on the Brown, Swan, Goshorn & Sinnett tract. It is good for 5 bbls. a day. In the same district, the South Penn Oil Co. has completed in the same formation No. 6 on the R. P. Parker farm, and is the same kind of a pumper.

In Center district, Wetzel County, the Hope Construction & Refining Co.'s No. 7 on the J. A. Riter farm is a 5-bbl. pumper in the Gordon sand. In Union district, Tyler County, Samuel & Gabe have a 5-bbl. pumper at No. 14 on the Gale heirs' farm.

**Test Wells Due and Starting**

In Church district, Wetzel County, the Manufacturers Light & Heat Co. is due in the sand on the J. H. Himelrick farm. In Clay district, the Hope Natural Gas Co. is drilling down to the lower sands on the J. B. Burch farm. In Liberty district, Marshall County, the Carnegie Natural Gas Co. has the rig completed on the S. N. Cole farm. In the same district, the Hope Construction & Refining Co. has made the location for No. 6 on the I. G. Logsdon farm.

In Ten Mile district, Harrison County, Dr. D. E. Ritter & Co. have a rig up on the M. E. Ritter farm. In Clark district, the Clarksburg Light & Heat Co. is due in the sand at No. 86 on the Homer Custer farm. In Union district, Lincoln County, Roy & McComas have part of the rig material at a location on the Randolph Sias farm. In the same district, the Huntington Development Co. is drilling on the G. F. Porter farm. In Carroll district, the Cambridge Gas Co. is rigging up on the C. E. Wilkinson farm. In Grant district, Cabell County, W. H. Curtley & Co. have shut down for casing on the W. E. Martin farm. In the same district, the Monickel Gas Co. has shut down for a wire line on the Smith farm.

**Ritchie County**

In Grant district, Ritchie County, the Reno Oil Co. has completed No. 3 on the J. L. Mulenax farm. It is a very light pumper in the Big Injun sand. In Murphy district, the second test of C. S. Moris on the Hendershot-Hardman farm is a gasser in the Big Injun sand.

In Grant district, Pleasants County, Frank Dunn and others have a duster on the William P. McTaggart farm. It has been abandoned. In Center district, Gilmer Count, the Hope Natural Gas Co. test on the Albert Vanhorn farm, an old well drilled down, is a gasser in the Big Injun sand.

**Braxton County**

In Birch district, Braxton County, the Pure Oil Co.'s test on the R. H. Bourne farm is dry and abandoned. In Otter district, H. C. Zogg & Co. have now drilled a test on the W. N. Cutlip farm through the Gordan sand and dry. In Center district, Calhoun County, the United Fuel Gas Co.'s second test on the Fannie H. Norman farm is a gasser in the Big Injun sand. In the same district, the Ohio Fuel Oil Co.'s test on the W. S. Stevens farm is a gasser in the Big Injun sand.

The Philadelphia Oil Co.'s test on the D. C. Core farm in Clay district, Monongalia County, is dry in all sands. The hole has been plugged and abandoned. It

(Continued on Page 121)

# SAGINAW FIELD ACTIVITY GROWS; COMPLETING NINE AVERAGE WELLS

By Whit
*Staff Correspondent, Michigan Fields*

SAGINAW, Mich., Mar. 18.—The Saginaw Field showed more activity durin the past week than any of the larger fields of the central west and southern fields, there being nine completions reported and all were producers ranging from 20 to 35 bbls. initial from the Berea sand, and all in defined limits, where there are several hundred more locations yet to drill and still possibilities of a farther extension to the east and northwest.

The best of the late wells is the Fordney Petroleum Co.'s second well in the southeast corner of the Ace Park Ball Grounds, which tapped the sand at 1,797 feet and went 19 feet in the sand and using a charge of 80 quarts as a shot, the initial showing was for at least 35 bbls. or more. No. 1 brought in some time ago is reported to be doing 30 bbls. daily. No. 3 will shortly be started.

The Sun Oil Co. brought in two producers, No. 2 on the Adam Nuerminger 20 acres, being the north quarter of the S half SE, Section 11, Saginaw Township, showing for 220 bbls. initial, top of sand at 1,846 feet, drilled 16 feet in the sand and shot with 60 quarts; and No. 2 John Stelzreide 80 acres, being the N half SE, same section.

Saginaw Prospecting Co.'s No. 4, on the Deindorfer Woods, Saginaw City-owned property, in the SW NE, Section 14, struck top of sand at 1,811 feet and drilled 20 feet in, and after being shot with 80 quarts, shows for 25 bbls.

The Ohio Oil Co.'s No. 4, on the Mershon-Eddy-Parker property, just north of the Pere Marquette Railroad and in Carrollton Township, is reported good for an initial of 25 bbls. or better.

Wayco Oil Co.'s No. 1, on the Charles H. Spiekerman property on Weiss Street, east of Eddy Street, struck the Berea sand at 1,804 feet and went 18 feet in and was shot with 60 quarts, getting a 25-bbl. producer.

J. & S. Development Co.'s No. 1, on a community lease at Clark and Shaefer Streets, has all the earmarks of a 25-bbl. pumper after being given a 60-quart shot. Top of sand was at 1,812 feet and drilled 22 feet in the sand.

G. & W. Oil Co.'s No. 1, on the Barbara Myers property at Ash and Schaefer Streets, is showing for 25 bbls. initial. Sand was topped at 1,812 feet and drilled 17 feet in the sand and shot with 60 quarts.

Schwinck Oil Co.'s No. 1 C. E. Sparling property, on North Michigan Avenue near the Pere Marquette Railroad, struck top of sand at 1,805 feet and went 20 feet in, stirring it up with a 60-quart shot, developed a 20-bbl. producer.

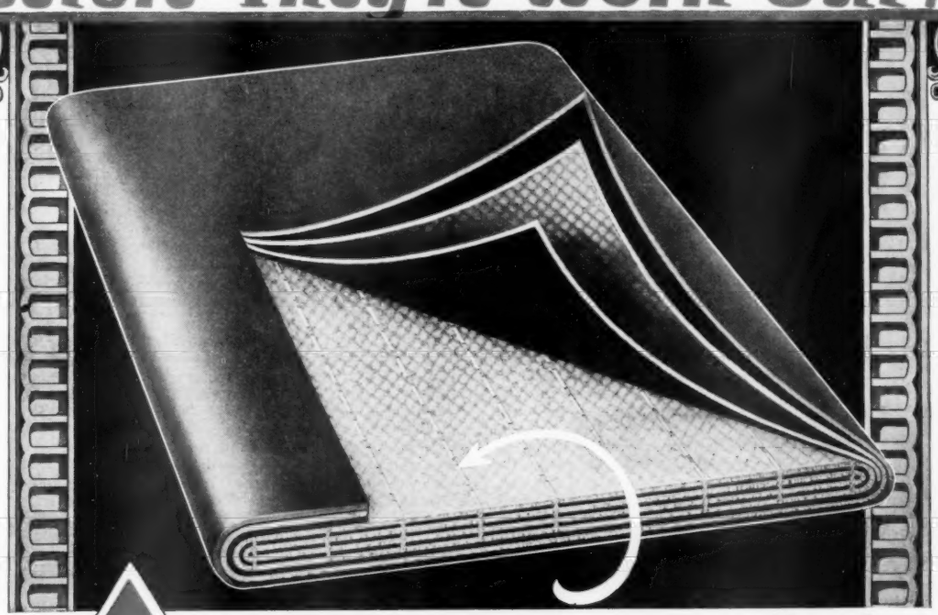
**Nearing Pay Sand**

Crescent Oil Co.'s No. 1, on the F. Chesbrough property at Clark and Hill Streets, is on top of the Berea sand.

Another well due is Burdow and

(Continued on Page 121)

# 50% of Oil Field Belts "BOOTLEG" Before They're Worn Out!



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# CONTINENTAL

# Seneca County Reports 90-Bbl. Well

## Central West Had 21 Completions With 314 Bbls. Production, 5 Dry Holes and 6 Gas Wells

By Whit

*Staff Correspondent, Central West Fields*

FINDLAY, Ohio, Mar. 19.—Rain and mud continued to make work in the Central West Field lag as there were but 21 completions reported for the week in the four divisions of Lima Field, Central Ohio, Indiana and Illinois. New production totalled 314 bbls., 5 dry holes and 6 gas wells.

The feature of the Lima Field was the bringing in of a well on the Hunker lease, near the town of Cromer, in Liberty Township, Seneca County, to the northwest of Tiffin, that is reported to have flowed 90 bbls. initial production.

Indiana is credited with two good producers. One is on the F. B. Colbert farm, Veale Township, Daviess County, in the southwestern part of the state, with an initial 24 hours gauge of 120 bbls. from a depth of 1,160 feet. The other is No. 3 on the E. Beck farm, Section 24, Logan Township, Pike County, with an initial of 50 bbls., at a depth of 1,347 feet. A wildcat on the Watt farm, Greer Township, Warrick County, proved dry at 1,428 feet, while a test on the Frank Thompson farm, Section 6, Washington Township, Gibson County, proved a duster.

In the Allendale Field of Wabash Township, Wabash County, Illinois No. 4 on the Alka heirs farm, Section 1, had a production of 75 bbls the first 24 hours at 1,484 feet, while in Casey Township, Clark County, No. 3 on the Wheeler Baker farm, Section 36, showed an initial of 40 bbls. from the Niagara Limestone at 1,598 feet.

In Central Ohio Field a test on the Druzilla Kyser farm, Richland Township, Holmes County, produced 15 bbls. initial. Two very good gas wells were found in Dover Township, Cuyahoga County, on the Kinkler lease, Lot 7 and No. 2 Walter Elliott lease, Lot 16.

### Lima Field

The feature of the old Lima Field of Northwestern Ohio for the week was the completion of a well far above the average by J. H. Murphy and Son in No. 2 on the Dave Hunker farm, near the hamlet of Cromer, in Liberty Township, Seneca County and northwest of Findlay. The well is reported to have flowed 90 bbls. and may mean the opening of another extension to the old Trenton Rock producing area.

In Webster Township, Wood County, between Toledo and Bowling Green, John Geldin and others' No. 6 well, 660 feet from the south line and 610 from the west line of the Charles Gelden farm, in the NW, Section 22, pumped an initial production of 11 bbls. Top of Trenton at 1,226 feet and drilled 27 feet in the sand.

In the south edge of Findlay, on Summitt Street, the well of J. E. King on his lot, Section 24, Liberty Township, Hancock County, that came in a light gas well, but a shot brought forth an oil showing and the well is credited with a production of 3 bbls. Top of sand at 1,254 feet and oil at 65 feet in the sand.

J. L. Fee drilled a test in the southeast corner of the M. Weiter farm, in the NE, Section 22, Noble Township, Auglaize County, and a short distance in advance of old production. Sand was topped at 1,177 feet and drilled 40 feet in and had a production of 5 bbls. In Moulton Township, same county, H. F. Kelly and others' No. 3 in the northeast corner of the James H. Harshbarger farm, in the SW, Section 10, tapped the Trenton at 1,175 feet and drilled 36 feet in the sand where salt water was encountered and is a duster as far as oil is concerned and will be abandoned.

Edward Anderson's second test 1,230 feet from the south line and 280 from the west line of the John Fisher farm, in the NW, Section 12, Center Township, Mercer County, is a 5-bbl. pumper at a total depth of 1,219 feet or 59 feet in the sand.

With the lowering of the crude market during the past month or so, operators do not appear to be so anxious to do development work as they did last fall, still if the price was at the high point but little could be done in parts of the field, owing to the conditions and inability to move material over the leases as the frost is all out of the ground and it will require a long time of bright sunshine to bring about much of an improvement.

### Indiana

The late completion in Veale Township, Daviess County, in southwestern Indiana, by Hartman, Sargent and others in a test in the southeast corner of the F. B. Colbert farm, in the E half of the SE, of the SE, Section 21, and one-half mile northeast of No. 1 on the Peak farm, is a very good producer, with an initial 24 hours' production of 120 bbls. from the second pay sand at a depth of 1,160 feet. Same company's No. 1 on the Frank Swan farm, Section 28, same township, and a diagonal offset to the good well on the Peak farm, had hard close sand and after a shot, made only a light showing and may be drilled to the lower or 1,400-foot sand that has been proved productive in the field. This is known as the Washington District, named after the county seat. In the same section the Thorne Oil & Gas Co.'s test 1,000 feet from the north line and 300 from the west line of the Wonders farm, in the SW, proved to be a dry hole at a depth of 1,430 feet, failing to find a commercial pay in either the 900, 1,100 or 1,400-foot sands.

Improvement should now be shown in the Daviess County area for heretofore the operators have been compelled to go a long distance for supplies. This has been remedied as the Jarecki Supply Co. has moved its store from Centralia, Ill., to Washington, making only a few miles haul from the Gaither Field and the new territory recently opened by Hartman, Sargent and others. Phipps & Blosser failed to find any pay in the 900 and 1,100-foot sands at a test on the Stanton Barber farm, Section 33, Veale Township, and is now going down to the 1,400-foot sand.

The wildcat venture of the Sunlight Coal Co., in the southeast corner of the Charles and J. A. Watt farm, in Greer Township, Warrick County, found only a slight showing of oil at from 1,405 to 1,406 feet and drilled to a total depth of 1,428 feet where the venture was given up as a dry hole. One other well is being drilled in Warrick County which is the Turner Oil & Gas Co.'s No. 2 on the Veck-Folson farm, Section 7, Pidgeon Township.

In Logan Township, Pike County, Henry Skidmore's No. 3 in the southwest corner of the E. Beck farm, in the NW, Section 24, came in as a surprise, the well having an initial production of 50 bbls. Sand was topped at 1,336 feet and drilled 11 feet in the sand.

Bell Brothers' test, 200 feet from the south line and 600 from the east line of the Frank Thompson farm, in the SW of Section 6, Washington Township, Gibson County, is a dry hole at a total depth of 1,341 feet. In the same township, the Euclid Oil Co. is drilling No. 4 Veirling heirs farm, Section 29, and Gray, Morrisey and others are drilling No. 2 on the Margaret A. Mauk farm, Section 29. In Montgomery Township the wildcat well of John Enlow and others on the John Enlow farm, Section 5, is delaying on account of weather conditions and shut down. In Barton Township, same county, the Gem Oil Corp. is drilling No. 3 on the H. E. Raiborn farm, Section 8.

No completions were reported for a week from the old Trenton Rock area of eastern Indiana, although a few wells are nearing the sand in Blackford, Jay and Adams Counties.

### Illinois

Only two completions are reported from the Illinois fields during the past several days and they are many miles apart, one being in the north end and the other in the extreme south end of the long north and south strip of territory covering parts of several counties along the eastern part of the state.

The best of the completions was in the Allendale Field, of Wabash Township, Wabash County and is Joe S. Young Jr., and others' No. 4 well, 200 feet from the north line and 600 from the west line of the E. Alka heirs farm, in the NE, Section 1, which had an initial production of 75 bbls. Top of sand was found at 1,467 feet and drilled 17 feet in the sand.

The other completion was made by W. C. Turner and others in No. 3 well, 200 feet from the north line and 660 from the east line of the Wheeler Baker farm, in the NE of Section 36, Casey Township, Clark County, 2 miles south and about 5 miles east of Casey and 3 miles south and about one mile west of Martinsville. The oil found in the Niagara Limestone formation and showed 40 bbls. initial at a depth of 1,598 feet.

### Central Ohio

Eight new wells are reported from the Central Ohio Field, one being an old well good for 15 bbls., one was a dry hole and 6 were gas wells. The oil producer was a test drilled by the Reno Oil Co., in the southeast corner of the Druzilla Keyser 42 acres, Section 25, Richland Township, Holmes County, and some distance from oil production. The well is reported at 15 bbls. No. 2 in the northeast corner of the same farm, proved a duster, while No. 3 is drilling in the southwest corner of the same farm. In Monroe Township, same county, the Ohio Oil Co.'s No. 4 well, 300 feet from the north line and 900 from the east line of the Oliver M. Smithisler 37 acres, Lot 7, is an average gas well.

In the Cleveland Field of Cuyahoga County, and in Dover Township, Dempsey and Daugherty found an excellent gas well in the northeast corner of the Kinkler 22 acres, Lot 7, in the Newburg sand which lies above the Clinton lime. The Logan Gas Co. found a good gas producer in No. 2 in the northwest corner of the Walter E. Elliott 48 acres, Lot 16. Wiser Oil Co. is drilling No. 1 in the northwest corner of the C. Jenkins 18 acres, Lot 15 and Arthur & Simpson are doing the same with a second test 200 feet from the north line and 800 from the west line of the H. Martin 29 acres, Lot 15. In Strongville Township, same county, Dillon

(Continued on Page 118)

# DEEPER DRILLING IN PETERMAN BEND TO FOLLOW DISCOVERY WELL SHOW

By Whit

SCOTTSVILLE, Ky., Mar. 21.—No completions were reported from the central and eastern portion of the State, and but three counties were listed with new wells in Kentucky, and one in Tennessee. In Clay County, Tennessee, the well on the Gray farm, in the Peterman Bend area, the discovery well of the pool, drilled deeper to some distance below the Pencil Cave, is reported good for 200 bbls. This will no doubt bring about deeper drilling in other wells over the same area. A 100-bbl. producer is also reported in No. 2 on the Burton Lanford 100 acres, same area, which got its pay just below the Cave formation.

### Week's Work

The summary of the week's work in the Kentucky-Tennesse fields show 8 completions, 7 producers, with an initial production of 318 bbls., and 1 dry hole. When compared with the previous week, there were 12 less completions, 10 less producers, 33 bbls. less production, and 2 less dry holes. The wells were distributed by counties and districts as follows:

| County— | Comp. | Oil Wells | Prod. | Dry |
|---|---|---|---|---|
| Ohio | 3 | 2 | 15 | 1 |
| Allen | 2 | 2 | 2 | 0 |
| Warren | 1 | 1 | 1 | 0 |
| Kentucky | 6 | 5 | 18 | 1 |
| Tennessee—Clay County | 2 | 2 | 300 | 0 |
| Total | 8 | 7 | 318 | 1 |
| Last week | 20 | 17 | 351 | 3 |
| Difference | 12 | 10 | 33 | 2 |

### Western Division

Only six completions in the western division of Kentucky and no new wells in the more eastern area, and but two in Tennessee, make one of the most inactive weeks in the past few years in the Blue Grass regions, but this was expected just as soon as the rainy season started. Reports from Ohio, Hancock, Daviess and Warren, as well as Barren-Cumberland Counties are that too much water and mud is shown to do work to any advantage.

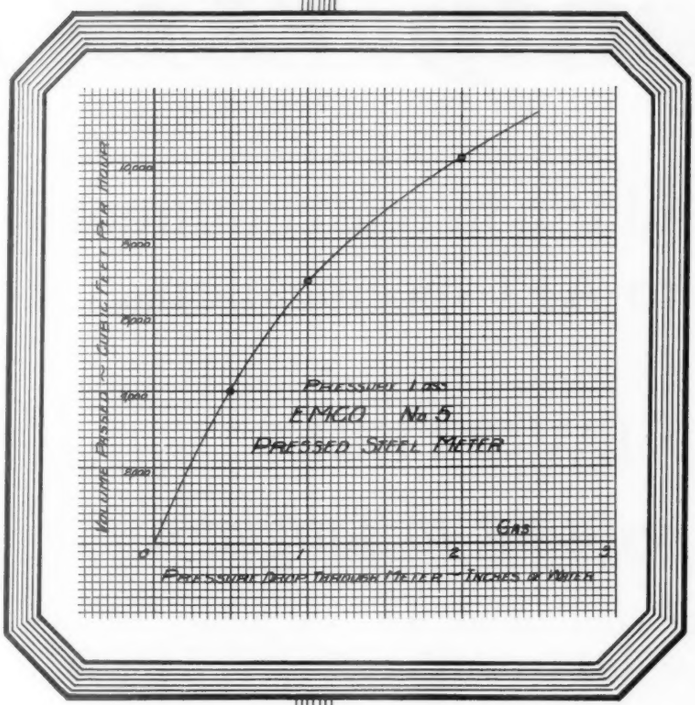
In District 5 of the Bowling Green Field of Warren County, A. B. Hudson, attorney, drilled in No. 3 on the James Dethridge farm, and its location being 100 feet from the north line and 1,580 from the east line of the lease, and the total depth of 1,028 feet, showed only 1 bbl. after given a shot.

In the Scottsville Field of Allen County, District 2, Harley & Coatsworth's No. 7 on the W. H. Reed farm was drilled to a total depth of 275 feet and shot with 20 quarts, and responded with a 1-bbl. production the first 24 hours. In the same district, Riley Hunt has the same sized producer in No. 5 on his own farm at a depth of 318 feet.

In the Swope Pool extension in Ohio County, the Chicago Petroleum Syndicate's No. 5 on the Mrs. Nannie Brown 80 acres, just west of the Gunther-Gant farm and north of the Joe Bob Ellis farm, set 735 feet of casing, struck top of sand at 746 feet and bottom at 776 feet and drilled to a total depth of 780 feet, where a 100-quart shot made a 10-bbl. pumper. In the same area in District 10, the Wood Oil Co.'s No. 7 on the J. U. Bartley 159-acre farm developed into a dry hole, a thing that usually happens close in to production, but does not condemn more than a few feet around it. In the north end of the county and

(Continued on Page 118)

# Running 10,000 Cubic feet per hour with pressure loss of less than 2 inches!

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The curve shown above is an actual test made on a No. 5 EMCO PRESSED STEEL METER and shows the pressure absorption through the meter expressed in inches of water, for various volumes. It will be seen that for the rated volume, 10,000 cubic feet per hour, the loss is less than 2 inches.

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| Size Rod | 5/8" | 3/4" | 7/8" |
|---|---|---|---|
| Pin | 15/16" | 1 1/16" | 1 3/16" |
| Collar | 1 3/8" | 1 1/2" | 1 11/16" |
| Square | 15/16" | 1" | 1 1/16" |

| ORDINARY STEEL | THIS SPECIAL SUCKER ROD STEEL |
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| Elastic Limit, 50,000 lbs. per sq. in. | 71,000 lbs. |
| Tensile Strength, 100,000 lbs. per sq. in. | 114,000 lbs. |
| Elongation, 25% | 56% |
| Red. in Area, 45% | 56% |
| FATIGUE VALUES, 20,000 | **50,000** |

NOTE—An increase of **42%** in elastic limit, but the Fatigue Resistance is **2½** times that of the ordinary steel.

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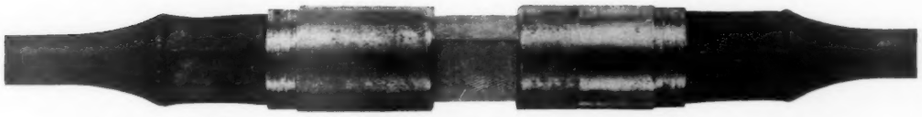


ALSO MADE IN OUR FAMOUS GIANT DOUBLE PIN—
WITH THE STRONGEST COUPLING

# NES COMPANY

RIGHT BLDG., TULSA, OKLA.

# MEN KNOWN IN OILDOM

**A. S. Hopkins**

**A. S. Hopkins, the new president of the Standard Oil Company of Kansas, started with the company 30 years ago as a laborer at a wage of 12½ cents an hour and rose step by step through practically every minor and major job at the refinery. As superintendent and later as an officer and director he enjoyed an exceptional popularity.**

**Mr. Hopkins achieved the ambition of his lifetime when he took his place at the helm of the corporation he had watched and helped to grow to an $8,000,000 concern.**

**Born on the old Hopkins farm, northwest of Neodesha, 53 years ago, he received his first training in agriculture. But when he was ready to try his hand at winning a livelihood, it was not agriculture that commanded his first attention. In company with many other young men of his day, he became fascinated with the new-born oil industry in southeastern Kansas and secured a job at the Neodesha refinery.**

**It is a far cry from that first position in the refinery yards to the president's desk, yet Mr. Hopkins has traveled that route in his 30 years of service. It was not until 1908 that he was appointed assistant superintendent, although he had held supervisory positions previous to that time. In 1913 he became general superintendent, succeeding Thomas Black and in 1925 was made vice-president and general manager.**

**As the inventor of the Hopkins' fractionating tower and numerous other devices, Mr. Hopkins is well known throughout the refining field.**

**He is a graduate of the Neodesha high school and a former student of the University of Kansas. He is a director of the First National Bank of Neodesha, a member of the Neodesha Board of Education, secretary of the Wilson County Hospital Board and an active member in the Neodesha Chamber of Commerce and Rotary Club.**

# PERSONAL PARAGRAPHS

Edward Prizer, chairman of the Vacuum Oil Company, is on a trip 'round the world.

* * *

O. W. Killam, oil operator of Laredo, Tex., has returned home from a trip to Dallas, Tex.

* * *

Elmer E. Laughner, prominent oil producer of Pennsylvania and Oklahoma, is spending the winter at St. Petersburg, Fla.

* * *

Lew D. Hilton, Mid-Continent manager of the Regan Sales Company of California, is visiting in Tulsa and Oklahoma cities.

A. L. Derby, president of the Derby Oil Company of Wichita, Kans., is on a tour of west Texas oil areas.

* * *

Walter M. Priddy, president of the American Refining Company of Wichita Falls, Tex., spent a few days in Tulsa, Okla., last week.

* * *

William H. Winn, district manager of the Marland Oil Company at San Angelo, Tex., was in San Antonio, Tex., for a few days.

* * *

W. E. O'Meilia, in charge of tank equipment department for Westcott & Greis of Tulsa, Okla., is in California on a business mission.

* * *

Lorimer Dunlevy, sales manager of the Climax Engineering Company of Clinton, Iowa, has been in the Mid-Continent Field visiting the trade.

* * *

After having returned from New York, P. J. Hurley, president of the Gilliland Oil Company, has been visiting Wichita Falls, Tex., on business.

* * *

F. H. Wickett, chairman of the board, Pan American Petroleum & Transport Company, has been elected to the directorate of the Empire Trust Company.

* * *

W. W. McCarty, of Wichita Falls, Tex., superintendent of production for the Pandem Oil Company, made a trip around the Cisco district this week.

* * *

C. F. Henderson has been appointed agent for the Griscom-Russell Company of New York, on the Pacific Coast, and has offices at 542 Call Building, San Francisco, Calif.

* * *

W. R. Wheeler, of Shreveport, La., head of the land department of the Southern Crude Oil Purchasing Company, spent a couple of days in Fort Worth, Tex., this week.

* * *

Morvin Thomas, sales manager of the Southwest Supply Company of Bartlesville, Okla., has returned from a trip through the Texas Field where he was calling on the trade.

* * *

V. S. Swisher, Oil City, Pa., secretary and assistant treasurer of the Southern Group of Pipe Lines, has returned from Hot Springs, Ark., and his health is much improved.

* * *

O. W. Needham, superintendent of production for the Gulf Production Company in the Panhandle of Texas, visited the Wichita Falls, Tex., office of the company one day last week.

* * *

F. D. Williams, Oil City, Pa., president of the National Transit Company, and F. O. Wright, general superintendent of the same company, were Pittsburgh, Pa., visitors last week.

* * *

The S. M. Jones Company of Toledo, Ohio, maker of sucker rods, has appointed M. B. Reynolds, sales representative in the Texas Panhandle, and he will have headquarters at Amarillo, Tex.

* * *

T. M. Magee, Bovard, Pa., retired superintendent of the Southwest Pennsylvania Pipe Line Company, is spending the winter at Hot Springs, Ark., and will return the latter part of the month.

* * *

Harry Sample, of the Marland Oil Company at the San Angelo, Tex., office, has resigned his position to go with the Vacuum Oil Company in a similar position in the land department.

* * *

T. R. Bartlett, of Tulsa, Okla., has been appointed agent for the Duryea Manufacturing Company of Bayonne, N. J., makers of woven cotton belting, and will cover the Oklahoma fields for that concern.

* * *

W. B. Sprague, formerly geologist with the Gulf Production Company at Corsicana, Tex., has arrived in San Antonio, Tex., to take charge of the San Angelo, Tex., district of The Texas Company.

* * *

Max Buffum, oil operator of Laredo, Tex., has been in San Antonio, Tex., for a few days. He was accompanied by Mr. Huber who is interested in the No. 1 Huber-Crawford, drilling in San Patricio County.

Lord and Lady Greenway are making a tour in Persia. They were entertained to dinner by the directors of the Anglo-Persian Oil Company, Ltd., on the eve of their departure.

* * *

H. L. Montgomery, manager of the gas division of the Empire Companies, Bartlesville, Okla., was chosen second vice president of the Oklahoma Utilities Association at its recent session in Oklahoma City, Okla.

* * *

A. S. Henley, chief geologist of the Houston Oil Company, Mr. Tucker, company engineer, Mr. Shays, field geologist, and Mr. Nash, scout of the company, have been in Kingsville, Tex., the past week going over the field.

* * *

W. E. Hornaday, of California, is in San Antonio, Tex., and planning operating in southwest Texas. He is at this time interested in a well drilling in Hidalgo County, with B. H. Adams. Mr. Hornaday formerly operated in various fields of Oklahoma.

* * *

F. L. Sweet, district manager of the Arco Company of Cleveland, Ohio, who maintains headquarters at San Antonio, Tex., was visiting the Oklahoma oil fields recently and conferring with R. Starkweather, Tulsa, Okla., representative of the company.

* * *

John Caldwell, a native of Titusville, Pa., is making a trip through the south and southwest Texas fields, accompanied by Mrs. Caldwell. They drove from Wichita Falls, Tex., to Houston via San Antonio and met a number of former Titusvillians, in Houston.

* * *

Walter Scott Lee, of New York City, a member of the general engineering department of the Standard Oil Company of New Jersey, has been in Oil City, Pa., looking over the facilities of the National Transit Pump & Machine Company for the building of hot oil pumps.

* * *

Ben F. Horton, who for more than a year has been land man and scout for the Fleeger-Houston Oil & Gas Company, has accepted a position as scout for the Sinclair Crude Oil Purchasing Company and will cover western Kansas, his headquarters to be in Wichita, Kans.

* * *

F. J. Audibert, superintendent of terminals for the Magnolia Petroleum Company, with headquarters at Beaumont, Tex., has made an inspection of the Houston, Galveston terminals and that on the bay near Corpus Christi. He was formerly with the Prairie Pipe Line Company at Bartlesville, Okla.

* * *

Joseph Cullinan, son of the late Dr. M. P. Cullinan, of Laredo, Tex., is in Houston, Tex., on a business trip. He is contracting in the Webb-Jim Hogg Fields. His father was president of the Border Gas Company at Laredo, 17 years and was one of the best known natural gas officials in the country.

* * *

Jerry Farquhar, of Pittsburgh, Pa., treasurer of the Plymouth Oil Company, holding concern for the Big Lake Oil Company, and Levi Smith, president of the latter company, passed through Fort Worth, Tex., on their way to Reagan County. They were accompanied by Claude Pugh of N. Holmes & Son, bankers and brokers, of New York and Pittsburgh.

* * *

Alex Pattison, Jr., formerly warehouse manager of the Standard Oil Company of Louisiana, Shreveport, La., is visiting friends in Shreveport before his return to the Dutch East Indies. Three years ago he was transferred to Batavia, Java, as office manager for the Nederlandsche Koloniale Petroleum Maatschappij, (Standard of New Jersey). He will return to that post for another three years.

* * *

W. C. Brower, manager of the crude oil department of the Vacuum Oil Company, with offices in New York, visited the Coastal fields during the week. W. B. Sutton, of the land department and J. E. Duff, land commissioner, have been in Baton Rouge and New Orleans, La. Wayne C. Williams, Vacuum scout, has resigned to become connected with the Smith Separator Company, with Houston, Tex., headquarters.

"OILWELL" ESTD. 1862 TRADE MARK REGISTERED

# "OILWELL" CROWN BLOCKS

"OILWELL" ESTD. 1862 TRADE MARK REGISTERED

Side view of 12-inch Rotary Crown Block

**"OILWELL"** Crown Blocks can be furnished with sheaves made of Cast Iron, Steel or Manganese Steel. The beams used range from 8″ to 15″ and weigh as high as 50 pounds per foot, depending on the work required.

When furnished for Cable Tool Rigs or where cleaning out and pumping are to be done after completion of the well, a sand line sheave is added, two of the inside beams being extended to carry this sheave.

All **"OILWELL"** Crown blocks have the following superior features:

1. All sheaves are machined in the grooves, and have holes through the web for attaching a line to pull them up in the derrick.
2. All bearings are either of the Ring Oiling or Roller Bearing type which makes them weatherproof and dustproof. The bearings are held in place in such a manner as to make it impossible for any of the bolts, should they get loose, to drop and cause damage or possible injury to any of the crew. The base of each Ring Oiling Bearing acts as a reservoir for the oil and is of sufficient capacity to make the oil supply last for long periods of operation. Roller Bearings are located in the hubs of the sheaves and are lubricated by means of the Alemite System. Adjustment is the same as that for Ring Oiling Bearings. If desired, one or more sheaves can be furnished with roller bearings and the remainder with ring oiling bearings.
3. Each block is furnished with "T" slotted side rails which permit easy adjustment of all sheaves. Simply loosen two nuts on each bearing.
4. Spacing blocks are of cast design and permit more rigid assembling than when pipe spacers are used.

Top view of 12-inch Rotary Crown Block

*Inquire at Any of Our 100 Branches*

## OIL WELL SUPPLY CO.

NEW YORK—LOS ANGELES—PITTSBURGH, U.S.A.—SAN FRANCISCO—TAMPICO—LONDON

WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT

# Natural Gas Developments

## CONTROL OF GASSER PRESENTED PROBLEM

When the Canadian Oil Co.'s well on the Linkey property at Shamrock, Tex., broke loose early in February, making 90,000,000 feet per day, officials despaired of capping it, reports Lew Hilton, Mid-Continent manager of the Regan Sales Co. He further reports:

"The Regan crew was called in to consider ways and means of bringing the well under control. We found the outer casing consisted of three joints of 20-inch pipe; 10-inch casing had been set on the bottom with no clamps, but with a collar at the top of the 10-inch casing down in the cellar. Inside of this had been set 8¼-inch casing suspended on a spider and equipped with a collar and a nipple, the gas gushing out through the nipple. The top of the 8¼-inch nipple was 7 feet 8½ inches above the top of the 10-inch collar.

"We decided that it was totally impractical, on account of the terrific volume and pressure of gas, to unscrew the 8¼-inch casing nipple in order to attempt to cut same for the purpose of placing the first part of a Regan control head on same and decided that the better course would be to build up the 10-inch casing to the top of the 8¼-inch casing first. After measurements were taken, a nipple was cut and we proceeded as follows:

"As the 8¼-inch casing had a collar up and could not be safely unscrewed, we decided to take an 18-inch nipple and insert it on top of the 8¼-inch collar. On top of this nipple a Regan Santa Fe type coupling, taken from a 10 by 8¼ Regan spool, was first attached. This nipple and collar were then screwed in the bottom of a joint of 8¼-inch pipe for the purpose of giving the necessary dead weight to offset the terrific upward pressure of the gas and in this way it was possible to screw the pipe into the collar of the 8¼-inch casing. With this accomplished, it was then possible to remove the elevating joint and spider holding the 8¼-inch casing. This left the 8¼-inch pipe with the Regan coupling up.

"The next procedure was to take a 10-inch built-up nipple with a Regan 10-inch bottom flange attached to the top of the nipple and strip it over the 8¼-inch joint and back it down to the 10-inch collar down at the bottom of the cellar. The nipple was then screwed into the 10-inch coupling in the cellar.

"This brought the top of the 10-inch bottom flange to the proper distance below the 8¼-inch Regan special coupling so that a 10 by 8¼ spool could be screwed thereon at the desired location.

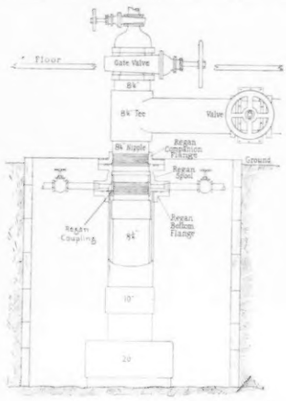
"In order to mount the spool the temporary joint of 8¼-inch casing was again utilized. Over this was stripped the spool to about one-half the distance up the joint and securely lashed to the joint. The 8¼-inch joint was then screwed into the Regan coupling and the slack of the pipe was taken up after which the spool was screwed over the coupling and the bolts added and tightened. The temporary 8¼-inch joint was then unscrewed from the coupling.

"At this stage of the work the 10-inch casing was tied to the 8¼-inch string, all of which work could have been eliminated, had a bottom flange been set at the time the 10-inch casing was originally landed.

"The well was now ready to be capped as the necessary equipment had been installed, but under difficulties.

"To cap the well an 8¼-inch Regan companion flange was equipped with a nipple, tee, nipple and gate valve. The side opening of the tee was also equipped with another nipple and gate valve, providing two openings.

"This entire assembly was brought to the cellar and the companion flange was attached to the spool, eccentric fashion, by means of one bolt not screwed too tightly. With this one bolt holding the spool and flange, the entire assembly was swung around through the gas flow and the boys waiting with bolts slipped them




through the flange holes as soon as the assembly was brought completely over the hole and then tightened the bolts. This completed the capping and it was then simple work to turn down the valves and gradually shut in the gas.

"By this quick action," Hilton concludes, "upwards of $2,500 per day was potentially saved, to say nothing of the hazards and possible destruction that might have occurred had the gasser remained in its wild stage. Rapid work in capping likewise conserved hundreds of millions of feet of gas, retaining pressure within, and the value of this pressure is worth many times the tangible value of the gas."

## NATURAL GAS LINES FOR PANHANDLE TOWNS

AMARILLO, Tex., Mar. 19.—Plans for the construction of a natural gas line from the Amarillo Field have reached the stage of having right of ways obtained, gas supply contracted for and pipe ordered and construction contracts let by the company, temporarily called the Texas Gas Co. A new name is now being selected and incorporation papers will shortly be taken out.

Natural gas from wells on the Bivins ranches, in Potter, Moore, Carson and Hutchinson Counties will be purchased and transported to Canyon, Happy, Tulia, Kress, Plainview, Hale Center, Aiken, Muncey, Floydada, Abernathy, Slaton and Lubbock.

The Texas Gas Co., still using its pre-organization name, believes its line will cost $5,900,000 completed. There will be 28 miles of 16-inch from the Bivins wells to an absorption plant to be built north of Amarillo; 75 miles of 14-inch from Amarillo to Plainview; 50 miles of 12-inch to Lubbock; 17 miles of 8-inch from Lubbock to Slaton, and 29 miles of 6-inch from Plainview to Floydada. Additional materials will be laid as the demand materializes. In the meanwhile the franchises secured and construction work ordered will take care of 10,000,000 feet of gas a day, with a peak of 15,000,000 feet.

Construction work will start around May 1, and it is expected to be completed by the middle of September, or October 1, and be in operation by early October. The first link from the gas wells to Amarillo will be completed by July 1. The first booster station will be at Plainview.

Contract for the Texas Gas Co. line and stations has been given to Williams Brothers, Inc., of Tulsa, Okla., which in turn has awarded parts of the main job to the John W. Moore Construction Co. of Amarillo; the Panhandle Construction Co. of Lubbock, and the Irick Construction Co. of Plainview.

The Texas Gas Co. is in no wise connected with The Texas Company or the reported gas line from the Amarillo Field to Kansas City, and it is headed by A. J. McMahan, of Oklahoma City, Okla., and associates. R. A. Tipton, the original promoter of the South Plains gas line; W. W. Graves, consulting gas engineer of Amarillo; George R. and Frank Broadwell, of Oklahoma City; F. H. Mason, vice president of Peabody, Houghteling & Co.; S. H. Sheritt, of S. H. Sheritt & Co., bankers, of Chicago; Col. Webster L. Benham, engineer, Kansas City, Mo.; A. N. Christopher, National Tube Co., Toledo, Ohio; A. J. Bemis, of Chicago, western manager of Day & Zimmerman, of Philadelphia; S. M. Williams, of Williams Brothers Inc., of Tulsa, and Ralph E. Davis, consulting gas engineer of Pittsburgh, Pa.

These men have been working on the South Plains gas project since early in 1926, when W. W. Graves, consulting gas engineer, who built the artificial gas plant at Kansas City, Mo., in 1897, first visited Amarillo. He has been here continuously since April, 1926, and most of the details of the plan were worked out under his direction.

The Texas Gas Co. proposes to supply domestic gas to the towns where it has franchises for 67½ cents per thousand feet, and the industrial rate will range from 45 to 15 cents.

## HOUSTON PIPE LINE BEGINS NEW GAS LINE

HOUSTON, Tex., Mar. 19.—The Houston Pipe Line Co., the natural gas subsidiary of the Houston Oil Co., has started work on a 16-inch line from near Alvin to Texas City, a distance of about 27 miles. The trunk line from the Refugio, Live Oak and Webb County Fields will be tapped near Alvin and approximately 7,000,000 feet per day delivered at Texas City to industries there.

Texas City is an industrial town located on the mainland about 10 miles across the bay from Galveston on Galveston Island. The crude terminals and docks of the Humble Oil & Refining Co., Vacuum Oil Co., Swiftsure Petroleum Co., Knox Process Corp. and a refinery of the Pierce Oil Corp. are located there. In addition there is a sugar refinery and other plants. The line from Alvin will be completed by May 1 and it is believed the consumption will increase with the completion of the big compressor station on the trunk line at Edna in operation.

The Houston Oil Co. recently completed two wells in the Refugio gas field with a combined output of 30,000,000 feet.

### IOWA CONSOLIDATION

FORT DODGE, Iowa, Mar. 19.—A merger of $30,000,000 worth of Iowa public utilities is announced affecting more than 200 Iowa towns. The companies are the Central Iowa Power & Light Co. and the Iowa Light, Heat & Power Co. The merger will be known as the Central Iowa Power & Light Co. The firms form part of the extensive holdings of the United Gas Improvement Co. of Philadelphia, which also owns the Sioux City Gas & Electric Co., the Sioux City Service Co. and the Des Moines Gas Co.

## HELIUM EXTRACTION PLANT FOR CANADA

By Victor Lauriston

CHATHAM, Ontario, Mar. 19.—Following the acquisition by the provincial government of Ontario last year of the natural gas areas at Inglewood, in Peel County, steps are being taken toward the establishment in the Inglewood Field of a helium-extraction and gas-research station. This was recommended in the report of the National Research Council of Canada for 1925-26.

Negotiations are in progress between the provincial government of Ontario, the University of Toronto, the Federal Department of Mines, and the National Research Council.

The National Research Council has requested the British Air Ministry to sanction the transfer to the University of Toronto of the helium plant established at Calgary during the Great War. It is proposed to operate this plant for the purpose of helium research. The National Research Council has volunteered to grant $5,000 toward the establishment of a gas research laboratory, and to contribute a further sum not exceeding $5,000 per annum for three years after the plant is ready to operate. Proceeds from the sale of helium will be set aside for further scientific research.

As helium gas is of tremendous importance in the operation of dirigibles, the British Air Ministry and the Department of National Defense at Ottawa are keenly interested in the investigations.

The Inglewood area, in Peel County, was tested some years ago for a commercial production of natural gas. A small gas production was developed in three wells. This production was thought too small to utilize commercially, but later an investigation of the natural gas production in this area showed an unusually high percentage of helium. It is stated that the Inglewood area contained enough helium to satisfy scientific requirements for many years to come.

It is expected by the helium committee of the National Research Council that the plant will be in operation late in the fall of 1927 or early the following summer.

### QUANAH LINE NEAR COMPLETION

The Oklahoma Contracting Co. has completed approximately 15 miles of 18-inch gas line for the Lone Star Gas Co., an extension of their line from Quanah to Shamrock in the Panhandle or a distance of 80 miles. This line is welded every two joints and then Dresser coupled.

### CITY SELLS SYSTEM

HUNTINGTON BEACH, Cal., Mar. 19.—The municipal gas system was sold to the Southern Counties Gas Co. for $75,000. Only one bid was submitted. Citizens voted to sell the system some time ago after oil began encroaching on the city. Several thousand dollars' worth of city gas lines and equipment were abandoned in the oil section.

### NITROGEN GAS WELL?

AMARILLO, Tex., Mar. 19.—A non-inflammable gas, believed to be nitrogen gas, was found at 1,665 feet in the Prairie Oil and Gas Co.'s No. 1 Landergin, in the northeast of the southwest of Section 46, Block H3, of League 310, Capital Lands, 8 miles north of Vega, in Oldham County. In addition to its not being inflammable, the gas appeared heavy and very hot. Drilling was suspended temporarily. The Prairie has a 100,000 acre block around its well, the one drilling in Oldham County.

*Above you see the W-K-M Tubing Slip as it appears when engaged. Four segments, with extra-large gripping area, insure positive grip and no swaging under any circumstances. The Slip rises when the string is lifted. No sticking or binding—ever.*

*Notice in this view of the W-K-M Tubing Slip the fillet head set screws which hold the four segments in place on the handles, allowing a small amount of horizontal movement, but no vertical movement.*

# This tool has *advertised itself* on to hundreds of leases

A man wanders over to his neighbor's lease, where they are pulling tubing on a well. He sees a contraption, new to him, in the way of a tubing slip with spider.

The roustabout gang works steadily on. Thribble after thribble gets itself racked up in the derrick. The tubing slip, he notices, seems to grab, hold and turn loose quickly and easily, with no particular effort on anybody's part. Not an inch of slippage on a mile of tubing, and not a sign of swaging on a single joint.

The man gets an idea—and the next day or so we get an order for another set of the now famous W-K-M Tubing Slips and Spiders. There's no other way to account for these orders.

This tool has literally advertised itself on to hundreds and hundreds of leases, all the way from Kentucky to California and in many foreign fields. The shortest strings at Humble, Texas, or the longest strings in the California fields—both are entrusted to W-K-M Tubing Slips.

There are a lot of pretty good reasons for this popularity. A number of them are discussed in a special booklet we shall be glad to send you on request. The coupon below or a postcard will bring it, in the next mail.

*This illustration shows the W-K-M Spider opened to permit a tubing catcher to pass through. To open the spider it is only necessary to remove the pin shown attached to the chain, and throw the two halves apart.*

**W-K-M COMPANY, Inc.**
**Houston, Texas**

*Descriptive Price Booklet Sent Free*

*Forty-seven square inches of diagonally-toothed wicker gripping area is what you get in the 2" size of the W-K-M Tubing Slip. On larger sizes the area is correspondingly larger. Compare this with the thread area of a coupling when elevators are used!*

W-K-M Company, Inc.
Houston, Texas.
Gentlemen:—

Without obligating us, you may send your descriptive price booklet on W-K-M Tubing Slips and Spiders to the address below:

Name .....

Street .....

City .....

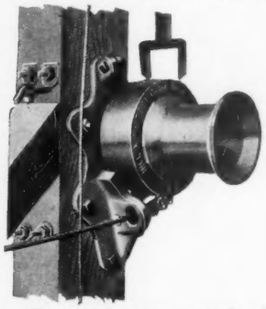
State .....

# EQUIPMENT AND SUPPLIES

## AUTOMATIC CAT HEAD DESCRIBED IN FOLDER

Hill & Foster Co. of Wichita Falls, Tex., has distributed a folder describing the Hill Foster automatic cat head or jerk line control. It is reported that this control is being well received by the rotary drilling contractors and companies running their own rotary tools.

The inventors and makers of this piece of equipment had three objects in



view: First endurance; second, absolute safety, and third, ease of operation.

The first was accomplished by simplicity of construction and eliminating as far as possible all springs, triggers and delicate parts that in heavy-duty machinery are a constant source of trouble and annoyance, and by thorough lubrication. The Alemite system is used, and only one cup is necessary to lubricate every working part.

The second object is accomplished by making it impossible for the cat head to jerk the tongs except at the will of the driller; and by limiting the jerk-line movement to a definite distance of about four feet. Any additional movement in either direction is impossible.

The third object was accomplished by having the machine stand unwound when not in use, and permitting the tongs to be put on with the same ease that they would be if the joint were to be broken with a rope and ordinary cat head.

## NEW AUTOMATICALLY OILED PRESSURE PUMP

The Deming Co. of Salem, Ohio, manufacturers of hand and power pumps, is now marketing through its oil-field representative, the Smith Separator Co., a new type of automatically oiled, high-pressure pump. These pumps are the fully enclosed type, the gears, eccentrics, crossheads, and other moving parts operating in a bath of oil, which is supplied from the gearing. They are built in duplex, triplex and quadruplex types, and have several unique features of design, a few of which are as follows: Only one small casting subject to high pressure; stuffing-box glands packed against suction only; ascoloy stainless steel piston rods, and eccentric drive from stationary main shaft.

These pumps range in capacity from 17 to 43 bbls. per hour, and for pressures from 300 to 500 pounds per square inch. For gasoline-driven unit they are regularly furnished with the Type U two-cylinder Novo engine, which has internal gear reduction and built-in clutch. With this construction, no moving parts are exposed except a flexible coupling. Other types of drive can also be furnished, such as electric motor drive with intermediate gearing and pulleys for belt drive.

They are especially recommended by the manufacturers for water supply, for handling remote oil production, and for putting oil from leaks and breaks back into the main line under high pressures.

## EXTENDED DELIVERY ON LARGE PIPE; MILL OPERATIONS RUN 85 PER CENT

By B. E. V. Luty

PITTSBURGH, Pa., Mar. 21.—There is too much line pipe business and not enough other kind of business to give the pipe mills a natural operation. Orders on hand are fully engaging the mill capacity in the largest sizes and some of the orders have had to be arranged for later deliveries than were desired. There is some business in sight which cannot be taken except for quite extended delivery. Apparently only three producers can make 20-inch pipe, and only two being able to go beyond 20-inch, and there is much business in such sizes now on books, but there is the Denver gas line, now said to involve 22-inch, 400 miles, and an inquiry of the Empire Gas & Fuel Co. for 250 miles of 20-inch.

In casing and other well material, on the other hand, the demand has been running somewhat light for the time of year. It has not opened up, on the approach of spring, as it had done at this date a year ago. There has, of course, been quite an increase in the past couple months, for in December and January the buying was very light indeed, as always at that time of year.

Demand for standard or merchant pipe has improved somewhat but is still decidedly light. The most active season is not yet at hand, and even last year there was hardly a capacity demand at any time during the year, while some prognostications would suggest that demand will be lighter this year.

### Lap Weld Operations

Lap weld departments of pipe mill are running nominally full but it is only in the larger sizes that capacity is being pushed. Butt weld furnaces average a 65 to 75 per cent operation. Among producers the average of pipe mill operations is estimated at around 85 per cent, but very likely the actual tonnage production is less than 85 per cent of what the mills could turn out if they were really well filled with orders for all sizes.

Steel ingot production as a whole is running this month at fully 90 per cent of capacity. This does not mean that finishing departments have an average of 90 per cent, as there is an excess of say 20 to 25 per cent in steel finishing over steel making capacity. This excess is a natural arrangement, as the distribution in demand among the different products varies from time to time and it is well for the industry to have some finishing capacity to spare.

The Steel Corporation's unfilled obligations decreased by 160,792 tons in January and 203,058 tons in February. Shipments increased from about 85 per cent of capacity to about 89 per cent of capacity, the daily rate of bookings being approximately the same in the two months. The decreases in the two months were due largely to there being heavy shipments of rails and tin plates while there were not corresponding bookings in these lines, contracts having been made late in the old year. In January and February of last year there were decreases in the unfilled tonnage of approximately the same amount.

### Steel Shipments

The Steel Corporation's annual report shows shipments of steel products in 1926 of 12,397,929 tons, with total earnings of $199,058,868. The corporation has other earnings, but by the conventional computation the "earnings per ton" were $13.92, against $12.36 in 1925, thus showing an increase of $1.56 per ton. The report states that average prices received, however, were $1.28 less, the two items making a total of $2.84 and this in a general rough way represents reduction in manufacturing cost, through steady operation, improvements and refinements, etc.

Finished steel prices have now been entirely steady for about a month, following about three months when there was a little slipping here and there almost continuously. Pipe prices have not changed, being in general at the level reached in the advance of four years ago.

Valley pig iron remains dull, but Bessemer is up 50 cents at $19.50, basic being $18 by last sales but $18.50 by present asking prices, foundry remaining at $18.50. Connellsville furnace coke is unchanged, foundry being up 25 cents.

## BUTLER MANUFACTURING PROMOTES OFFICIALS

At the meeting of the directors of the Butler Manufacturing Co. held in Kansas City, Mo., recently, William A. (Billy) Knapp was elected vice president and Fred A. Rufi was elected secretary. Mr. Knapp was formerly secretary, and

William A. Knapp

Mr. Rufi was formerly assistant first vice president of the company.

Mr. Knapp began work as secretary to C. R. Butler 16 years ago. It has been the policy of the Butler company to promote employes wherever possible, and both of these gentlemen will continue to perform their previous duties, Mr. Knapp in charge of sales and advertising and Mr. Rufi in charge of purchases.

### NEW BRANCH AT ABILENE

The Southwest General Electric Co. will open its latest branch sales office and warehouse at 741 South First Street, Abilene, Tex. It will serve oil field development in and around the Big Lake, McCamey, Chalk and Noddle Dome Fields. The company, with general headquarters in Dallas, Tex., operates warehouse branches in Houston, Oklahoma City, Tulsa and Amarillo. R. L. Henderson, of the general office at Dallas, has been appointed local manager at the Abilene branch and R. L. Hickey will be warehouse manager.

## Z. W. WHELAND ELECTED PRESIDENT LUCEY CORP.

With the regular annual meeting of the stockholders of the Lucey Manufacturing Corp. of Tennessee, the active control of the company passes to Z. W. Wheland, who was elected president.

F. E. Spencer, the retiring president, went to Chattanooga three years ago to put the company on its feet after a receivership. At the meeting, he reported that he felt the work he had undertaken had been practically completed, and that he should retire and give his attention to other interests.

The policies of the company inaugurated by Mr. Spencer will be continued, and the manufacture of the complete line of oil-well equipment will be continued as before, and production increased.

The board of directors passed a resolution of commendation of the meritorious and satisfactory work of Mr. Spencer.

The following officers and directors were elected: Z. W. Wheland, president and treasurer; F. E. Bernsen, vice president; W. S. Evans, vice president; A. C. Willingham, II, general manager; L. C. Train, secretary.

The above, with J. P. Hoskins and W. A. Sadd, constitute the board of directors.

Z. W. Wheland has been a prominent and successful manufacturer of Chattanooga for many years, and at the present time is active in the following companies: Treasurer, The Wheeland Co.; vice president, Street Brothers Machine Works; vice president, Purse Printing Co.; treasurer, Yates Bleachery; president, Chattanooga-Terminal Warehouse Co.; director, Chattanooga Savings Bank & Trust Co.

### OPENS TULSA BRANCH

J. A. Campbell, consulting gas engineer of Long Beach, Calif., and manufacturer of the Campbell "Oil Froth" absorber, has established a branch office in Tulsa, Okla. The Campbell line of gasoline plant equipment has proved so successful in the California Field Mr. Campbell says he feels quite confident of being able to introduce this line in the Mid-Continent.

The Tulsa branch is in charge of R. C. Flournoy, Jr., a salesman of wide experience in the oil country.

### TRADE LITERATURE RECEIVED

The Landis Machine Co. of Waynesboro, Pa., has printed a booklet featuring Landis threading die heads and machines in plants of various kinds throughout the country.

From Sheet Steel Extension Committee, Pittsburgh, Pa., the current number of "Making Markets," which contains two interesting stories about the changing habits of individuals.

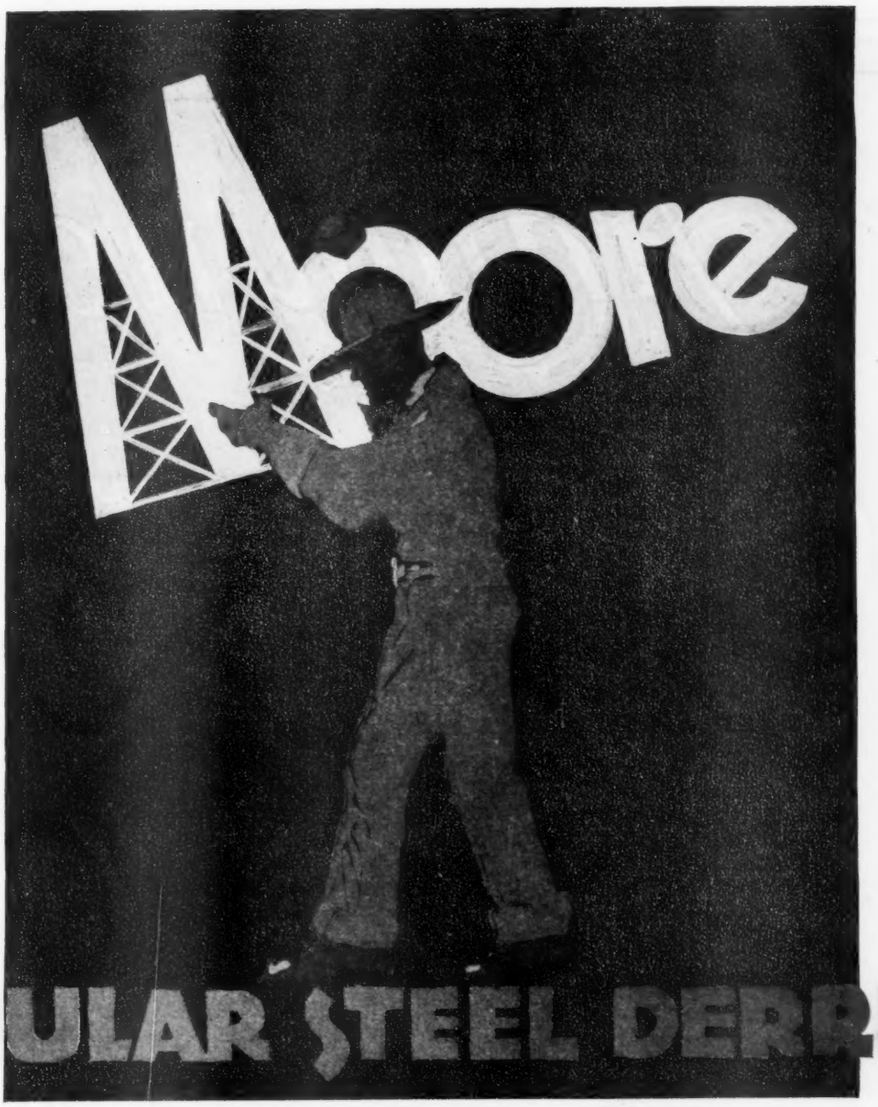
From Volz Engineering Equipment Co. of Los Angeles, Calif., a folder about the Volz steam separator and automatic lubricator.

From Sivyer Steel Casting Co., a catalog on alloy castings. New and varying requirements demand increased qualities of strength and toughness in metals, and this phase is discussed in the catalog.

From Wilson-Snyder, Pittsburgh, Pa., a folder describing the use of their hot-oil pumps.

From Laclede-Christy, St. Louis, Mo., the February bulletin devoted to description of various uses of fire brick.

From O. C. Keckley Co., Chicago, Ill., a new bulletin covering that company's complete line of water-gauge specialties.

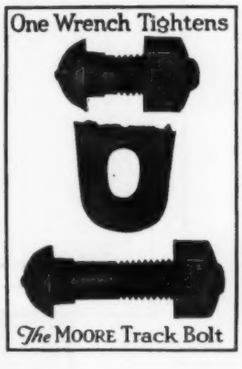



# TUBULAR STEEL DERRICKS

## TAKE IT WITH YOU!

THERE is nothing of the "Humpty Dumpty" in a Moore Tubular Steel Derrick. You can take it down and "put it together again" as often as need be. It's an easy job too, because of the lighter weight of tubular steel, the convenient clamp construction and the oval neck track bolts used.

The shipping weight of a Moore derrick is less; it is easier hauled over rough roads and it is so simply constructed that labor costs for dismantling, handling and erecting again are kept to a minimum. In five to ten years use, these economies often equal the entire first cost of the derrick.

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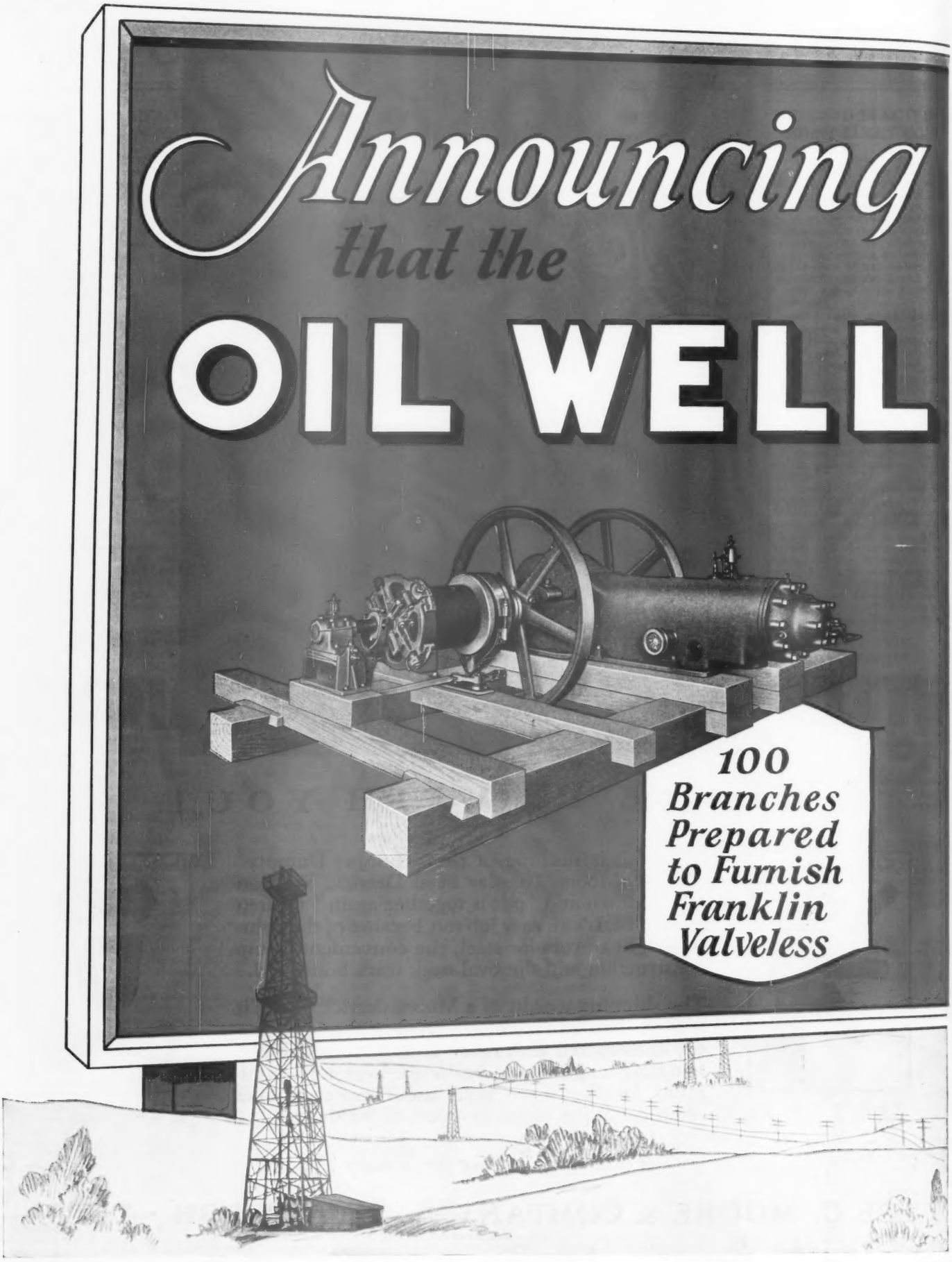
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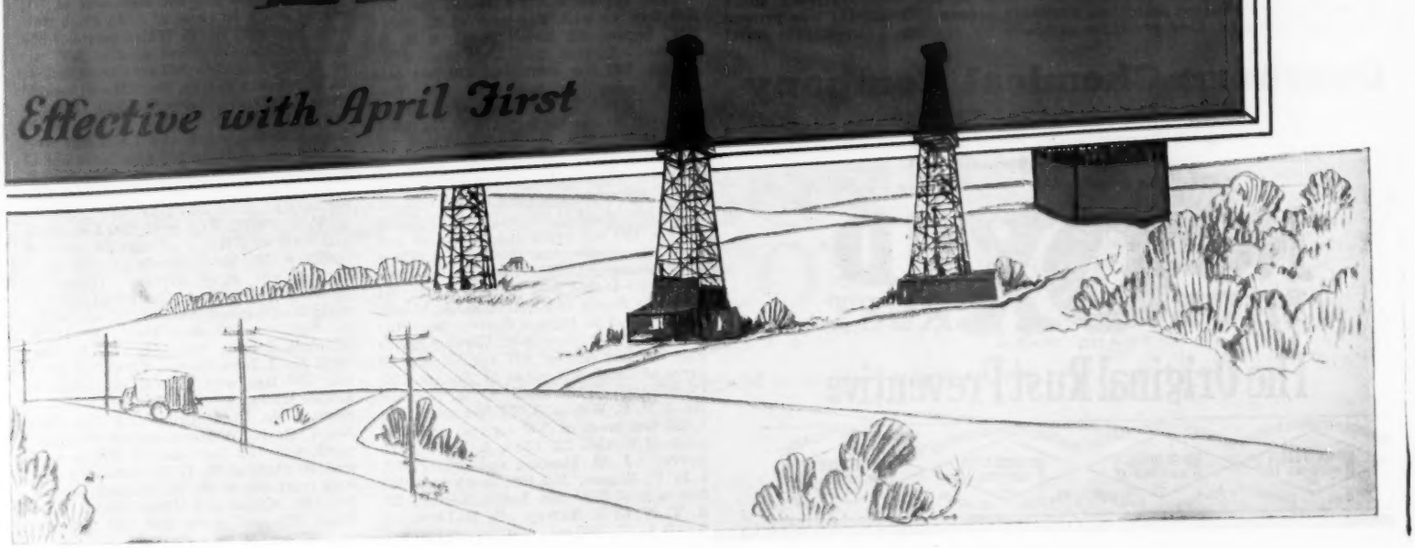

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The chemical action of NO-OX-ID in quenching rust, plus the mechanical action of a non-hardening seal, has influenced its use on thousands of miles of pipe line. One of the most interesting and difficult services is illustrated here. The line crosses an arm of the Pacific, Wilmington Bay, California, at a depth of 40 feet, low tide.

*Line, coated with NO-OX-ID and triple wrapped with NO-OX-IDized Wrapper. Sheathed in canvas to protect wrapper in lowering.*

*Preparing to coat repaired pipe line with NO-OX-ID at a depth of 40 feet.*

*Dearborn Service man telling the diver all about NO-OX-ID. Wishes he could go along.*

*Going down! The one place a Dearborn Service man does not follow the job.*

NO-OX-ID is the logical scientific successor to the comparatively short lived and far less efficient materials available before NO-OX-ID was proven in pipe line service. Our products serviced by experts. Investigate now!

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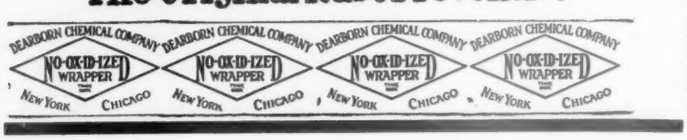



# NEW LOCATIONS IN TEXAS PANHANDLE AND NORTH AND WEST TEXAS FIELDS

## TEXAS PANHANDLE

### Carson County

Empire Gas & Fuel Co.'s No. 1 S. B. Burnett Estate-B, 385 feet south and 330 feet west of NE cor., Section 101, Block 4, I. & G. N. Survey; No. 1 S. B. Burnett Estate-G, 440 feet north and east of SW cor. Section 116, Block 4, same survey. Magnolia Petroleum Co.'s No. 2 M. P. Co. Fee No. 244, 330 feet south and east of NW cor. SE, Section 91, Block 4, same survey; No. 3, 330 feet north and east of SW cor. E half of the same section; No. 4, 330 feet north and east of SW cor. E half of Section 108, Block 4, same survey. Marston Oil Co.'s No. 2 E. F. Bryan, 990 feet north and 330 feet east of SW cor. NW, Section 92, Block 4, same survey. The Texas Company's No. 2 M. C. Burnett, 330 feet north and west of SE cor. SW, Section 113, Block 5, same survey; No. 10 S. B. Burnett Estate, 330 feet south and west of NE cor. W half, Section 100, Block 4, same survey; No. 3 M. P. Co. Fee, 330 feet north and west of SE cor. NW, Section 91, Block 4, same survey. Vitek Oil Co.'s No. 1 J. W. Eller, 330 feet south and west of NE cor. NW, Section 200, Block 3, same survey.

### Gray County

Foster and others' No. 1 G. Cutebank, 330 feet north and east of SW cor. NE, Section 65, Block 25, H. & G. N. Survey. Jack Doyle's No. 1 D. W. Osborne, 330 feet north and west of SE cor., Section 109, Block 3, I. & G. N. Survey. Neudigate and others' No. 1 A. Chapman, 330 feet south and west of NE cor. E half SE, Section 52, Block 25, I. & G. N. Survey. Pure Oil Co.'s No. 5 H. M. Davis, 330 feet north and east of SW cor. NE NE, Section 86, Block 3, I. & G. N. Survey; No. 6, 330 feet south and west of NE cor. SW NE, Section 86, Block 3, same survey; No. 7 330 feet north and west of SE cor. NW NE, Section 86, Block 3, same survey. The Texas Company's No. 1 J. B. Barrett, 330 feet south and 990 feet east of NW cor. Section 130, Block 3, same survey.

### Hutchinson County

Dan A. Japhet's No. 7 H. E. Smith and others, 330 feet north and west of SE cor., Section 11, Block Y. Minnehoma Oil Co. & Kistler's No. 4 Johnson Brothers, 330 feet south and west of NE cor. S half SW, Section 20, Block Y. Phillips Petroleum Co.'s No. 2 Johnson Brothers-Dove, 310 feet south and 730 feet east of SW cor., Section 70, Block 46, H. & T. C. Curvey, out of Dave Baker Survey, No. 4. Spring Creek Oil Co.'s No. 1 H. E. Smith and others-A, 330 feet south and east of NW cor. SE NW, Section 7, Block Y.

### Wheeler County

Tidal Oil Co.'s No. 2 W. E. Bentley, 330 feet south and east of E half SW, Section 42, Block 24, H. & G. N. Survey. Upham Gas Co.'s No. 1 C. George, 660 feet south and 330 feet east of NW cor. W half NW NE, Section 88, Block 17, same survey. Watchborn Oil & Gas Co.'s No. 1 F. E. Sheldon, C NE NE, Section 22, Block 24, same survey.

## NORTH CENTRAL & WEST TEXAS

### Archer County

Barnsdall Oil Co.'s No. 1 O. F. Haley Estate, 150 feet south and 2,640 feet east of NW cor., Section 15, Block 4, H. & T. C. Survey. L. T. Burns' No. 10 J. H. Turbeville-D, 150 feet south and 750 feet east of NW cor. of north 50 acres, of east 150 acres of R. Carson Survey, No. 142; No. 1 J. H. Turbeville-E, 150 feet north and 750 feet east of SW cor. of east 72 acres of south 152 acres of Section 124, Club Ranch Subdivision. C. A. Everets' No. 1 T. B. Wilson, 1,577 feet south and 1,497 feet west of NE cor. of west 276 acres of Section 12, Block 3, H. & T. C. Survey. J. M. Howard and others' No. 1 L. F. Wilson, 150 feet south and 760 feet east of NW cor. Lot 1, Section 23, A. T. N. C. L. Survey. E. B. Lawson's No. 6 L. F. Wilson, 490 feet north and 450 feet west of SE cor. Lot 7, of the same section. Pois & Schultz's No. 3 J. B. Miller, 750 feet south and 275 feet west of NE cor. of Lot 5, Section 19, of the same section. Roamer Oil Co.'s No. 1 A. B. Clagett, 150 feet south and east of NW cor. of east 100 acres of A. B. Clagett's 200 acre tract out of Mrs. Rachel Story Survey, No. 72, A-373. Simons & Everet's No. 3 T. B. Wilson, 1,875 feet south and 1,495 feet west of NE cor. of west 276 acres of Section 12, Block 3, H. & T. C. Survey. The Texas Company's No. 1 J. H. Turbeville, 1,865 feet north and east of SW cor. of R. Carson Survey, No. 175. Tidal Oil Co.'s No. 4 J. H. Turbeville-A, 150 feet north and 760 feet west of SE cor. NW R. Carson Survey, No. 152. Consolidated Oil Co.'s No. 1 W. L. Andrews, 150 feet north and east of SW cor. of NW, Section 1,824, T. E. & L. Survey. Mid-Kansas Oil & Gas Co.'s No. 8 A. J. Lowe, 450 feet north and 750 feet west of SE cor. of Lot 3, Crawford Subdivision out of I. Holman Survey, A-162. J. Razor and others' No. 1 S. S. Swisher, 150 feet north and east of SW cor. of north 80 acres of NE J. M. Swisher Survey, A-396. Tidal Oil Co.'s No. 2 L. H. Farmer, 505 feet north and 810 feet east of SW cor. of W. C. Winters Survey, A-662. Underwood Drilling Co. and others' No. 4 H. L. & J. F. Ward, 150 feet south and east of NW cor. of east 80 acres of south 120 acres of Section 1,378, T. E. & L. Survey.

### Brown County

Amerada Petroleum Corp.'s No. 23 J. H. Fry, 150 feet south and 615 feet west of NE cor. of their 75-acre lease out of the N half of George Stubblefield Survey, No. 622; No. 24, 475 feet south and 620 feet west of NE cor. of their 75-acre lease out of the same survey. Barbara Oil Co.'s No. 5 A. E. Metts, 150 feet north and 1,390 feet east of SW cor. of their 38-acre lease out of W. A. Marr Survey, A-1,704; No. 6, 200 feet south and 600 feet east of NW cor. of their 38-acre lease out of the same survey. A. H. Bowers and others' No. 4 J. T. Carson, 450 feet north and east of SW cor. of east 40 acres of west 80 acres of SW, Section 6, E. T. R. R. Survey. L. G. Bradstreet and others' No. 8 W. A. Stout, 150 feet south and east of NW cor. of Lot 2, W. B. Smith Survey, No. 155. Danciger & Rose's No. 5 J. W. Haynes, 150 feet south and 1,050 feet west of NE cor. of Section 9, Juan Delgado Survey, No. 785. Ell Evans and others' No. 1 J. H. Teague, 450 feet south and 150 feet east of NW cor. of west 55 acres of J. H. Teague's 107 acre tract out of William Miller Survey, No. 149. Gibson Oil Co.'s No. 3 J. W. Shore, 150 feet south and 450 feet west of NE cor. of south 80 acres of J. C. Pugh Survey, No. 635; No. 5 White estate, 1,350 feet north and 150 feet west of SW cor. of J. W. Newton's 865-acre tract out of R. Honeycutt Survey, No. 623 and located in D. B. Vernon Survey, A-935. Humble Oil & Refining Co.'s No. 12 Roy Hickman, 150 feet south and 1,050 feet west of NE cor. of their 160-acre lease out of Thomas Benson Survey, No. 783; No. 13, 150 feet south and 1,350 feet west of NE cor. of the same 160 acre lease; No. 17 E. P. & W. H. Kilgore-B, 200 feet south and west of NE cor. of east 20 acres of E. P. & W. M. Kilgore's 50-acre tract out of the same survey. Humphrey Brothers' No. 8 H. A. Newton, 1,410 feet south and 800 feet west of NE cor. of H. A. Newton's 206-acre tract out of R. Mitchell Survey, No. 141. H. L. Parker's No. 1 John Keesee, 1,300 feet south and 750 feet west of NE cor. of John Keesee 160-acre tract out of J. Lewis Survey, No. 43. Prairie Oil & Gas Co.'s No. 7 R. L. Westerman-East, 450 feet north and 150 feet east of SW cor. of east 60 acres of R. L. Westerman's 175-acre tract out of N. B. Mitchell Survey, No. 150. Quinn and others' No. 3 W. N. Pugh, 450 feet south and 150 feet east of NW cor. of west 65 acres of south 80

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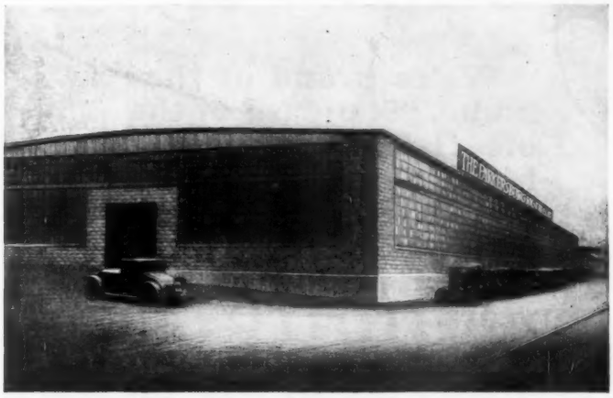
*Check the equipment in which you are interested, tear out and return this page to us, and we will send complete information.*



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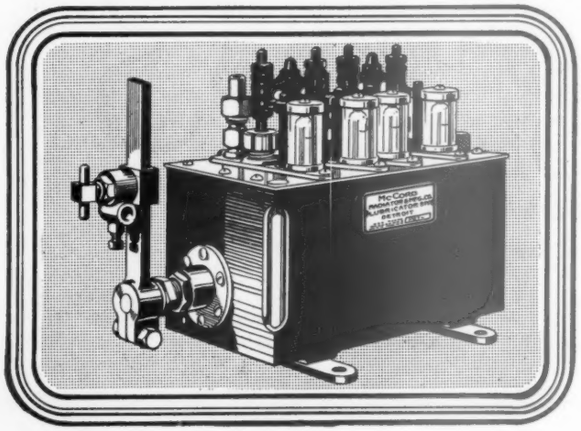



acres of W. N. Pugh's 160-acre tract out of C. J. Pugh Survey, A-761. E. H. Ramsey's No. 2 E. D. Henson, 450 feet south and 150 feet west of NE cor. of his lease out of Greenberry Logan Survey, No. 147. Rex-Pyramid Oil Co.'s No. 12 J. H. Fry, 950 feet north and 600 feet east of SW cor. of their lease out of the north half of George Stubblefield Survey, No. 622; No. 13, 1,350 feet north and 600 feet east of SW cor. of their lease out of the north half of the same survey; No. 14, 1,750 feet north and 600 feet east of SW cor. of the N half of the same survey; No. 15, 2,150 feet north and 600 feet east of SW cor. of their N half of the same survey; No. 16, 180 feet south and 600 feet east of NW cor. of their lease out of the N half of the same survey. Sawyer and others' No. 7 White Estate, 150 feet south and 450 feet east of NW cor. of their lease out of P. B. Vernon Survey, A-935. O. H. Shoup Jr.'s No. 12 J. Byler, 765 feet north and 1,990 feet east of SW cor. of T. & N. O. Survey, No. 43. The Texas Company's No. 27 Mrs. R. M. Lowe, 820 feet south and 1,635 feet east of NW cor. of their 320-acre lease out of George Stubblefield Survey, No. 622; No. 30, 890 feet south and 2,706 feet east of NW cor. of their same 320-acre lease; No. 31, 900 feet south and 3,035 feet east of NW cor. of their same 320-acre lease; No. 32, 810 feet south and 1,330 feet east of NW cor. of the same 320-acre lease; No. 33, 790 feet south and 1,025 feet east of NW cor. of their same 320-acre lease. Vondram and others' No. 1 J. R. Lewis, 600 feet south and 750 feet west of NE cor. of J. R. Lewis' 400-acre tract out of James Kenney Survey, No. 624. Owens Oil Co.'s No. 1 J. W. Seawalt, 680 feet north and 640 feet east of SW cor. of J. M. Steiner Survey, No. 15. Richmond and others' No. 1 J. A. Glass, 450 feet north and west of SE cor. of E. Lollinger Survey, No. 321.

**Callahan County**

Lawern and others' No. 1 J. O. Hall, 4,875 feet south and 660 feet east of NW cor. of H. F. Westall Survey, No. 199. Syndicate Oil Co.'s No. 1 R. L. Berry, 1,980 feet north and 3,000 feet west of NE cor. of Section 77, Bayland Orphan Asylum Lands and located in W. C. Powell Survey, No. 4. Warren & Harp Oil Co.'s No. 1 P. G. Hatchett, 150 feet south and west of NE cor., NW, Section 24, Deaf & Dumb Land.

**Clay County**

Coal Brothers' No. 1 R. L. Boyd and others, 450 feet south and 150 feet west of NE cor., Section 2,644, T. E. & L. Survey. Empire Gas & Fuel Co.'s No. 1 S. L. Wright, 150 feet north and west of SE cor., NW, Section 2,632, of the same survey.

**Coleman County**

Burke, Greis & Gwinnup's No. 1 W. M. Riley, 660 feet south and west of NE cor. of W. M. Riley's 160-acre tract out of R. Cochran Survey, No. 269. Magnolia Petroleum Co.'s No. 18 J. P. Morris, 2,400 feet north and 400 feet east of SW cor. of C. M. Mann Survey, No. 76, A-1,094. Shadbolt & Creighton's No. 1 Mary Louise Moran, 500 feet north and 715 feet west of SE cor. of J. A. Sylvester Survey, No. 288.

**Comanche County**

Texas Pacific Coal & Oil Co.'s No. 1 Mrs. J. A. Ward, 330 feet north and 990 feet east of SW cor. of Section 15, E. T. R. R. Survey.

**Cooke County**

American Refining Co.'s No. 9 J. A. Dennis, 150 feet north and 450 feet west of SE cor. of their 80-acre lease out of the N half of T. J. Moss Survey, A-736. Fain-McCaha Oil Corp.'s No. 1. A. A. Ottis, 150 feet south and east of NW cor. of W. C. Davis Survey, A-308. J. K. Hughes Development Co.'s No. 1 S. B. Hopkins, 2,865 feet north and 5,840 feet west of SE cor. of S. P. R. R. Survey, A-981. Kewanee Oil & Gas Co.'s No. 19 J. A. Dennis, 1,350 feet north and 450 feet east of SW cor. of their 160-acre lease out of the north half of T. J. Moss Survey, A-736. McElreath & Suggett's No. 1 W. R. Cannon, 465 feet south and east of the most northerly NE cor. of S. S. Hail Survey, A-510, and located in J. Decuire Survey, A-341. Sun Oil Co.'s No. 1 J. A. Dennis, 150 feet south and east of NW cor. of west 32 acres of the S half of T. J. Moss Survey, A-736.

**Crane County**

Tidal Oil Co.'s No. 4 University Land-F, 990 feet south and 330 feet west of NE cor. of Section 46, Block 30, University Land; No. 1 University Land-H, 330 feet south and east of NW cor. of NE, Section 38, Block 30, same land.

**Eastland County**

Keyes and others' No. 1 C. H. Fee, 160 feet north and east of SW cor. Section 64, Block 4, H. & T. C. Survey. Simms Oil Co.'s No. 1 U. A. Dingler, 150 feet south and west of NE cor. of Section 16, J. T. Sapp Survey, No. 34.

**Howard County**

Marland Oil Co.'s No. 6 Otis Chalk-A, 250 feet north and 2,590 feet west of SE cor. of Section 95, Block 29, W. & N. W. Survey; No. 7, 250 feet north and 1,962 feet east of SW cor. of the same section; No. 4 H. R. Clay, 1,520 feet north and 2,440 feet east of SW cor. of Section 139, Block 29, same section; No. 5, 1,120 feet north and 2,440 feet east of SW cor. of the same section; No. 3 H. R. Clay-A, 2,440 feet south and 200 feet west NE cor. of the same section; No. 4, 700 feet south and 1,150 feet west of NE cor. of the same section. Midwest Exploration Co.'s No. 1 H. R. Clay, 1,520 feet north and 2,440 feet west of SE cor. of the same section. Humble Oil & Refining Co.'s No. 3 E. W. Southit, 330 feet north and west of SE cor. NW, Section 123, Block 29, of the same survey.

**Jack County**

Buttram Petroleum Co.'s No. 6 C. K. Cullers, 745 feet north and 1,355 feet west of SE cor. of their 50-acre lease out of NW Sam Chairs Survey, A-930. Buttram Petroleum Co.'s No. 1 H. M. Williams, 330 feet north and 990 feet east of SW cor. of Section 2, B. S. & F. Survey, A-2,158.

**Jones County**

Campbell and others' No. 1 Bud Herndon, 1,320 feet north and 660 feet west of SE cor., Section 6, H. E. P. & P. Survey. Marston Oil Co.'s No. 1 J. S. Swann, 4,585 feet north and 330 feet west of SE cor. of Robe Spears Survey, No. 283. McLester and others' No. 1 M. H. Myatt, 2,360 feet north and 1,395 feet west of SE cor. of J. H. Wakefield Survey, No. 10. Phillips Petroleum Co.'s No. 1 E. Howell, 330 feet south and 1,650 feet east of NW cor. of Section 20, Block 19, T. & P. Survey; No. 4 J. R. Walling, 330 feet north and 980 feet east of SW cor., Section 19, Block 19, of the same survey; No. 5, 330 feet north and 1,632 feet east of SW cor. of the same section; No. 4 Joe Winters, 1,170 feet south and 330 feet east of NW cor. of the same section. Timberlin and others' No. 1 J. L. Hendricks, 150 feet north and east of SW cor., Section 37, Block 16, same survey.

**King County**

Gibson & Johnson's No. 1 S. B. Burnett Estate, 150 feet north and west of SE cor. NE NE, Section 34, Sam Lazarus Survey. Midwest Exploration Co.'s No. 1 Frank Patton, center of north 160 acres of Section 102, Block A, John B. Rector Survey. J. L. Pattison's No. 1 Frank Patton, 900 feet north and 600 feet west of SE cor., Section 44, Block A, J. B. Rector Survey. Sinclair Oil & Gas Co.'s No. 1 S. B. Burnett Estate, 150 feet south and west of NE cor. NW SW of William M. Elliott Survey. White Eagle Oil & Refining Co.'s No. 1 S. B. Burnett Estate, 1,320 feet north and west of SE cor. of G. W. Lompson Survey.

**Knox County**

Humble Oil & Refining Co.'s No. 1 F. F. Goode, 1,940 feet south and 200 feet west of NE cor., Section 7, H. T. & B. Survey.

**Montague County**

Arco Oil Co.'s No. 4 N. J. Howard and others, 150 feet south and west of NE cor. of their 40-acre lease out of J. Chambliss Survey, A-125; No. 1 J. W. Maddox, 150 feet south and east of NW cor., Lot 14, S. H. Arnold Survey, A-5; No. 4 Mrs. M. H. Salmon and others-B,

(Continued on Page 124)

## BURBANK FIELD IS NOT YET DEFINED

(Continued from Page 41)

which to offer quarter sections, 13 in all There has been some production in Section 35, but the district was cut off to the north by deep dry holes; and the township includes other dry holes, one of them close to 3,000 feet, which is deep for that area. To the south, in Township 26-7, considerable exploratory work has been done, but no production uncovered. Twelve leases will be put up, comprising Sections 11, 12, 18 and 26.

In Township 25-7, tracts have been selected in Sections 3, 6, 24 and 36. This township has also seen some unfruitful drilling for oil. Section 29 alone is offered in Township 24-7, and Sections 21 and 31 in Township 23-7, and Sections 4, 18, 27 and 34 in Township 22-7, which is getting close to good production, but all the leases may be regarded as wildcat.

### Burbank's Production Record

The Burbank Field in Townships 27-5 and 26-5 and 26-6, Burbank, Osage and Kay Counties, which was opened in May, 1920, had produced 135,986-902 bbls. up to March 2, according to a compilation made from the weekly reports of production by company since the field was discovered.

The Osage side of the field produced 113,157,012 bbls. from 1,891 wells on 24,480 acres, costing in bonuses the sum of $58,801,000.

The largest producer in the Burbank Field has been the Phillips Petroleum Co. From the leases of its own and the company's interests in partnership leases it is credited with 29,515,938 bbls., of which 23,901,291 bbls. was produced on the Osage County side of the field.

The richest quarter section in the Kay County side of the Burbank Field is the southwest quarter of Section 10-27-5, half of which is operated by the Comar Oil Co. and the other half by the Carter Oil Co. The total production of this 160 acres has been 3,644,987 bbls., or 22,781 bbls. to the acre. The south half of this quarter section, owned by the Carter Oil Co., has produced 2,151,874 bbls., or 26,-898 bbls. to the acre.

On the Osage County side of the field, the most productive section has been Section 24-27-5, which has produced 9,528,-234 bbls., of which the Gypsy Oil Co. produced 2,960,970 bbls. from the northwest quarter and 2,281,568 bbls. from the southeast quarter; Phillips Petroleum Co. and Skelly Oil Co. (in joint ownership), 2,107,061 bbls. from the northeast quarter and 2,178,635 bbls. from the southwest quarter. This 640 acres has produced an average of 14,888 bbls. per acre and 148,880 bbls. per well.

The most productive quarter section on the Osage side has been the Gypsy Oil Co.'s northwest quarter of Section 24-27-5, which cost the company $1,310,000 in bonus, and which has produced 2,960,970 bbls.

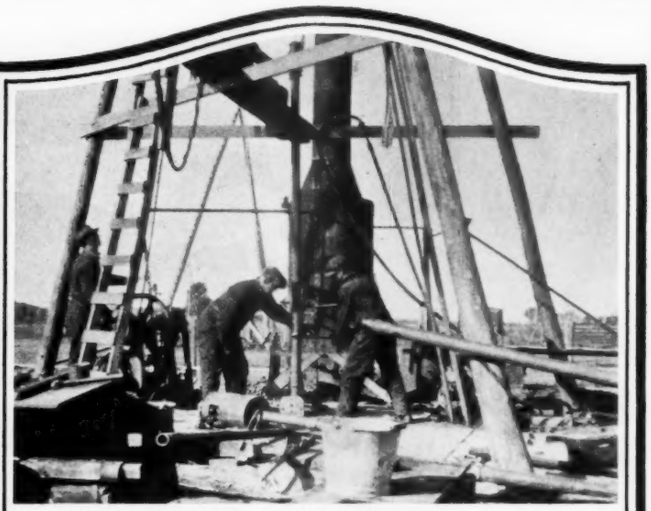
Other quarter sections which have exceeded the 2,000,000-bbl. mark in production have been the Carter Oil Co.'s northeast quarter of Section 22-27-5, 2,610,880 bbls., bonus price $1,025,000; Phillips Petroleum Co.'s southwest quarter of Section 11-27-5, 2,199,156 bbls., bonus price $335,000, and southwest quarter of Section 9-27-5 in which the discovery well in the Kay County extension was drilled by the Sapulpa Refining Co., now operated by Dye & Tomlinson (north half), production 1,091,960 bbls., and by the Comar Oil Co. (south half), 1,303,407 bbls., total production 2,395,367 bbls.; southeast quarter of Section 9-27-5, Kay County, operated by Mid-Kansas Oil & Gas Co. (north half), production 2,014,-241 bbls. and the Phillips Petroleum Co. (south half), 1,549,449 bbls., total production 3,563,690 bbls.

## CRUDE PRODUCTION BY LEASES

**Production of the Burbank Field in Osage and Kay Counties, Oklahoma, From Its Beginning in May, 1920, to March 2, 1927**

| Location— | Date of First Production— | Bonus Price | Number Wells | Total Bbls. Bbls. |
|---|---|---|---|---|
| Galt Brown: | | | | |
| SW 20-26-6 | February, 1927 | $ 3,000 | 1 | 120 |
| Carter Oil Co.: | | | | |
| NE 12-26-5 | September, 1922 | 325,000 | 5 | 180,084 |
| NE 20-26-6 | March, 1925 | 42,000 | 10 | 323,281 |
| NW 21-26-6 | March, 1925 | 176,000 | 16 | 815,395 |
| NW 12-26-5 | November, 1922 | 500,000 | 2 | 5,528 |
| SE 5-26-6 | February, 1921 | 500 | 16 | 1,210,223 |
| SE 8-26-6 | March, 1922 | 351,000 | 16 | 755,730 |
| NE 8-26-6 | November, 1921 | 300,000 | 16 | 732,988 |
| NE 9-26-6 | November, 1920 | 500 | 10 | 673,942 |
| NW 9-26-6 | September, 1920 | 3,600 | 6 | 502,687 |
| SW 9-26-6 | January, 1921 | 3,000 | 12 | 937,430 |
| SE 9-26-6 | February, 1921 | 3,000 | 16 | 1,188,870 |
| NE 13-27-5 | September, 1924 | 230,000 | 16 | 633,358 |
| NW 16-26-6 | December, 1920 | 5,400 | 16 | 944,896 |
| NW 13-27-5 | September, 1924 | 405,000 | 16 | 264,797 |
| SW 16-26-6 | June, 1923 | 385,000 | 16 | 1,038,247 |
| SE 1-26-5 | January, 1921 | 5,200 | 13 | 1,449,709 |
| SE 16-26-6 | June, 1923 | 127,000 | 15 | 750,420 |
| NW 11-27-5 | September, 1924 | 310,000 | 16 | 1,127,872 |
| NE 22-27-5 | June, 1923 | 1,025,000 | 16 | 2,610,880 |
| NW 17-26-6 | November, 1922 | 235,000 | 6 | 109,978 |
| SW 31-27-6 | February, 1921 | 7,100 | 15 | 844,870 |
| SE 31-27-6 | February, 1921 | 3,000 | 14 | 899,617 |
| NE 33-27-6 | August, 1922 | 160,000 | 1 | 6,247 |
| | Total | $ 4,602,300 | 285 | 18,007,049 |
| Comar Oil Co.: | | | | |
| NE 2-26-5 | November, 1922 | 410,000 | 7 | 302,350 |
| Mid-Continent Petroleum Corp.: | | | | |
| SW 14-27-5 | May, 1924 | 1,790,000 | 16 | 420,178 |
| NE 6-26-6 | November, 1921 | 310,000 | 16 | 684,912 |
| SE 14-27-5 | May, 1924 | 1,955,000 | 16 | 748,362 |
| NW 8-26-6 | December, 1921 | 115,000 | 16 | 633,235 |
| SW 8-26-6 | April, 1922 | 300,000 | 15 | 416,353 |
| NE 17-26-6 | May, 1922 | 500,000 | 16 | 591,832 |
| SE 17-26-6 | June, 1923 | 11,000 | 11 | 488,008 |
| | Total | $ 4,981,000 | 106 | 3,983,880 |
| Devonian Oil Co.: | | | | |
| SW 5-26-6 | April, 1921 | 700 | 16 | 989,043 |
| Gypsy Oil Co.: | | | | |
| NW 5-26-6 | May, 1921 | 900 | 15 | 975,404 |
| NW 7-26-6 | August, 1922 | 175,000 | 7 | 48,832 |
| SE 3-27-5 | May, 1924 | 151,000 | 7 | 88,955 |
| NW 24-27-5 | March, 1923 | 1,310,000 | 16 | 2,960,970 |
| SE 24-27-5 | September, 1922 | 1,600,000 | 16 | 2,281,568 |
| NW 19-27-6 | March, 1923 | 1,100,000 | 16 | 1,485,379 |
| SE 19-27-6 | September, 1922 | 1,050,000 | 16 | 1,733,444 |
| SW 28-27-6 | June, 1922 | 280,000 | 9 | 473,751 |
| NW 28-27-6 | December, 1922 | 205,000 | 1 | 77 |
| SE 28-27-6 | August, 1922 | 61,000 | 1 | 63,257 |
| NW 29-27-6 | September, 1922 | 1,000,000 | 16 | 1,270,303 |
| NE 31-27-6 | January, 1921 | 1,300 | 16 | 1,594,895 |
| NW 32-27-6 | January, 1922 | 226,000 | 16 | 898,675 |
| NE 10-27-5 | June, 1923 | 33,000 | 16 | 1,104,995 |
| NE 7-27-6 | December, 1926 | 42,000 | 1 | 17,027 |
| SE 22-27-5 | June, 1923 | 670,000 | 11 | 748,622 |
| NE 23-27-5 | June, 1923 | 1,195,000 | 16 | 1,645,277 |
| | Total | $ 9,100,200 | 196 | 17,391,431 |
| Kewanee Oil & Gas Co.: | | | | |
| NE 4-26-6 | March, 1922 | 205,000 | 10 | 421,024 |
| NW 34-27-6 | October, 1926 | 300 | 5 | 388,668 |
| SW 34-27-6 | October, 1926 | 75,000 | 4 | 300,787 |
| SE 34-27-6 | December, 1926 | 300 | 3 | 186,544 |
| SE 7-26-6 | November, 1922 | 275,000 | 2 | 25,625 |
| SE 18-27-6 | May, 1924 | 285,000 | 14 | 260,986 |
| NE 34-27-6 | July, 1926 | 300 | 2 | 246,616 |
| | Total | $ 840,900 | 40 | 1,830,250 |

(Continued on Page 92)

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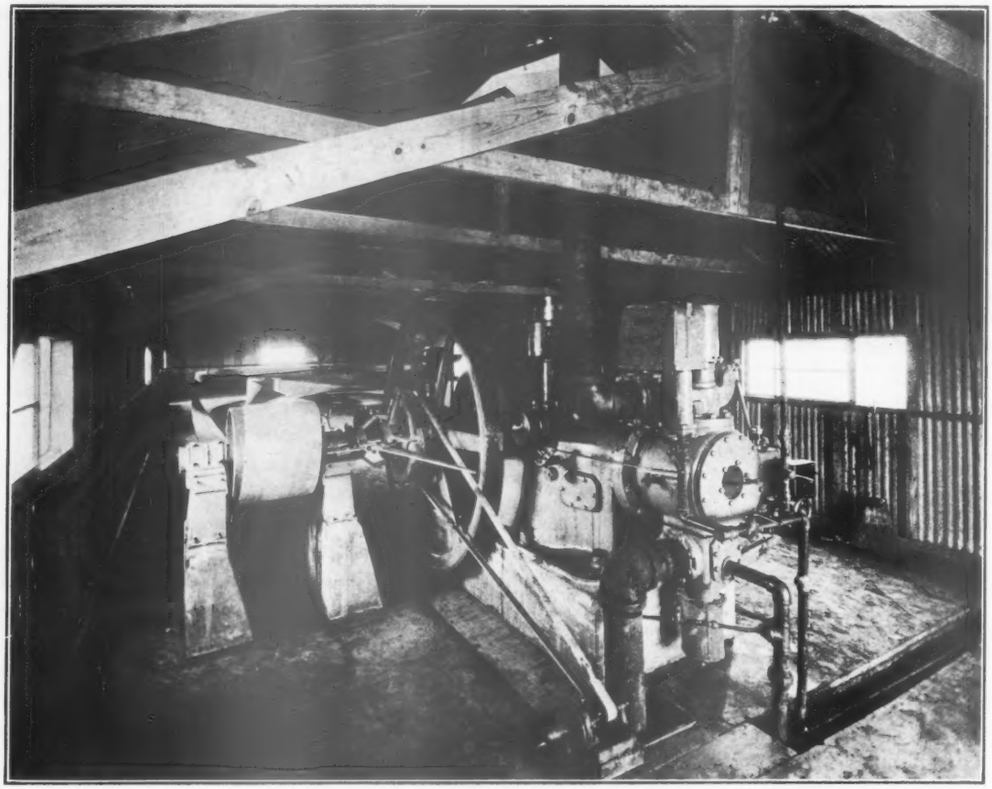

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## SOUTHWEST WILDCATS

(Continued from Page 56)

Whitehead ranch, close to the Kinney County line, in Survey 81 of Block D. G. S. & S. F. Ry. Survey, 1,900 feet from the west line and 960 from the south line of the survey. It is far removed from any production or wildcats.

Two wildcat tests will be under way soon in Duval County on the Ball ranch, in the southern part of the county. National Oil Co. is about to start the first test on a salt dome on the ranch worked out by W. L. Richards of Laredo, and George B. Pickett has 3,000 acres out of the ranch to the west of them and will drill some time this year. Scattered wildcats over Southwest Texas are starting up that will have more or less interest. The Texas Company is starting a well in southern Bastrop County at Redrock. Rio Bravo is starting a wildcat on the Finger tract, Survey No. 746, in western Medina County.

The Walker-VanDuyn No. 1 Leigh, in Kerr County at Center Point, drilling at close to 2,000 feet, has had continuous showings in formation now identified as Pennsylvanian from 1,610 feet to present depth. Pennsylvanian was topped at 680 feet. The showing of oil is slight and is in tight, compact lime, and the operators are expecting to break into sand or shale under the lime rock, and in that event will expect production. Some believe the lime rock, if shot, would produce, since similar showings have produced in North Central Texas in the same formation.

**Duval County**

Ralston M. Talbott, Inc.'s, No. 1 Margarite, Survey 4, located 2,500 feet to northwest lines and 1,320 feet to northeast lines, is standing at 1,697 feet. Humble Oil & Refining Co.'s No. 12 Singer, Survey 4, located 2,600 feet to north line and 2,000 feet to west line, is rigging up; No. 2 Dilworth, Survey 120, located 2,350 feet to west line and 1,000 feet to south lines, is drilling at 2,023 feet. Humble-Reiter-Foster's No. 4 Kohler, Survey 400, at 660 feet to southwest corner, has two sands, one at 2,339-51 feet and the other at 2,420-32 feet; No. 5 Kohler, Survey 395, located 1,080 feet to east line and 530 feet to south line, is rigging up. H. B. Schlesinger, trustee's, No. 1 Hahl, Survey 76, located 660 feet to northwest corner, is drilling at 2,510 feet. Hoffer-Smith's No. 1 King, Block 10, W. R. King ranch, at 1,320 feet to northwest corner, is shut down at 2,610 feet. Magnolia Petroleum Co.'s No. 1 Hahl, Survey 51, located 330 feet to southwest corner, is drilling at 3,950 feet.

**Jim Hogg County**

Holden and others' No. 3 Jones, Block 136, Share 7, located 330 feet to northeast corner, is standing at 800 feet. Hamilton and others' No. 1 Holbein, Block 44, Hamilton Subdivision, at 158 feet to lines and 363 feet to west lines, is drilling at 800 feet.

**Starr County**

Simms-Magnolia's No. 1 Salinas, Porcions 80-81, Block 6, Share 38 C, located 825 feet to north line and 175 feet to west lines, at 2,973 feet is on sand lime, showing salt water. Milham Corp.'s No. 2 Salinas, Porcion 111, SE cor., is drilling at 620 feet; No. 1 Salinas, Survey 9, at 1,275 feet to south line and 1,140 feet to east line, is drilling at 2,710 feet. Sterling & Suladie's No. 1 Yzaguirre, Block 8, Sterling & Suladie Subdivision, 1,320 feet to southwest corner, is drilling at 2,533 feet.

**Zapata County**

Earl K. Bateman's No. 2 Sorapio Vela, Share 2, El Crullo grant, is location. Mission Oil Co.'s No. 1 Slator, Borrego Survey, Block 6, located 4,577 feet to southwest lines and 11,853 feet to southeast lines, is coring at 1,155 feet. Buffalo-Erie Syndicate's No. 3 Martinez, Villa grant, located 5,000 feet to east line and 416 feet to south line, is deepening, total depth 725 feet. Magnolia Petroleum Co. has made location for No. 4 Cuellar, Cerrito Blanco grant, 5,110 feet to northeast lines and 150 feet to northwest lines. Harlingen Oil & Gas Co. has spudded in No. 5 Martinez in Charco Redondo, southeast of Hull test, and is drilling at 330 feet. Duke & Langford have made location for No. 3 Martinez, Block 22, at 150 feet to southeast and southwest lines.

**Webb County**

Mims & Putman, trustee's, No. 1 de la Garza, Survey 47, located 870 feet to north line and 1,170 feet to west line, is drilling at 1,267 feet. W. O. Wheatley and others' No. 2 Kruger, Survey 1,570, Block 4, located 140 feet to north line and 421 feet to east line, is drilling at 2,370 feet. Rawlins & Pelton have spudded in their No. 1 Garcia in Survey 736, Block 6, located 150 feet to southwest corner. O. W. Killam's No. 1 Billings, SE NW Survey 43, located 150 feet to south line and 750 feet to west line, is drilling at 1,200 feet.

**Atascosa County**

Grayburg Oil Co.'s No. 21-B Hartung, Survey 1,172, located 1,465 feet to west line and 740 feet to south line, is location of the first of 20 tests to be drilled within six months by Grayburg in the Somerset Field.

**Bexar County**

Bay Shore Production Co. has made location in the Somerset Field for No. 1 Walsh. Shannon & Shannon Oil Co. has made location 330 feet northeast of No. 3 for No. 4 Walsh. Marland Oil Co. is rigging up on Central Trust lease over core hole with rotary rig for test. A. R. Beal and others' No. 1-A Ackerman, one-fourth mile north of St. Hedwig road on White road, 2 miles east of city limits, has spudded in.

**Bastrop County**

Johnson Brothers' No. 1 Williams, Doyle Survey, 1,050 feet to northwest lines and 750 feet to southwest lines, is drilling at 1,400 feet.

**Bee County**

Nichols & White's No. 1 Hicks, Hicks-Ball Survey, Block 19, NW cor., is shut down at 821 feet.

**Caldwell County**

Fred Adams has derrick up on the Walter Ellison lease for test. The Texas Company is moving in machinery on the Goertz farm for No. 1, a little south of Red Rock. Sutton & Smith's No. 2 Robert Carter, G. Hinde Survey, is drilling at 2,200 feet. L. I. Dodwell's No. 1 Lawler, James Pinchback Survey, 750 feet to north line and 150 feet to east line, topped chalk at 2,174 feet. Flynn Brothers' No. 1 Carter, 4 miles south of Lytton Springs, are setting casing at 2,500 feet.

**DeWitt County**

McNeil & Matthews' No. 1 A. D. Kaiser, A. Dillard Survey, 1,508 feet to northwest corner, has been spudded in. Louis P. Schawe's No. 1 Gohmert is partly rigged up. Empire Southern Oil Co.'s No. 1 C. G. Smith, 8 miles southwest of Cuero, is setting casing at 2,441 feet with sand at 2,441-56 feet.

**Dimmitt County**

Humble Oil & Refining Co.'s No. 1 City National Bank, Survey 654, 700 feet to north line and 2,000 feet to east line, is fishing at 1,481 feet.

**Gonzales County**

Frank Sterns has made location for No. 1 Thames. Bristol Oil & Gas Co.'s No. 2 Denman, A. Zumwalt Survey, 1 mile southwest of Ottine, is shut down at 807 feet. Martin Oil & Development Co.'s No. 1 Preston, Pace League, near Cheapside, is waiting on casing, total depth 1,540 feet. E. Lee Moore's No. 1 Elder is drilling at 1,782 feet in sandy shale. Joe Bruner's No. 1 Vaughan, Kent Survey, 200 feet to west line and 300 feet to south line, at 1,406 feet, is waiting on repairs to ream and set 6⅝-inch casing, with oil showing from 600 feet. C. A. Campen's No. 1 Lamkin, 2½ miles from Waelder, pulled derrick in, killing one man.

**Guadalupe County**

Pat Armstrong's No. 1 Dale topped chalk at 1,652 feet. F. A. Lain's No. 1 F. C. Weinert, W. K. Estell Survey, 150 feet to center of north line, has been spudded in.

**Karnes County**

Earl B. Reynolds' No. 2 Butler, Block 43, located 1,000 feet south of No. 1, at

(Continued on Page 133)


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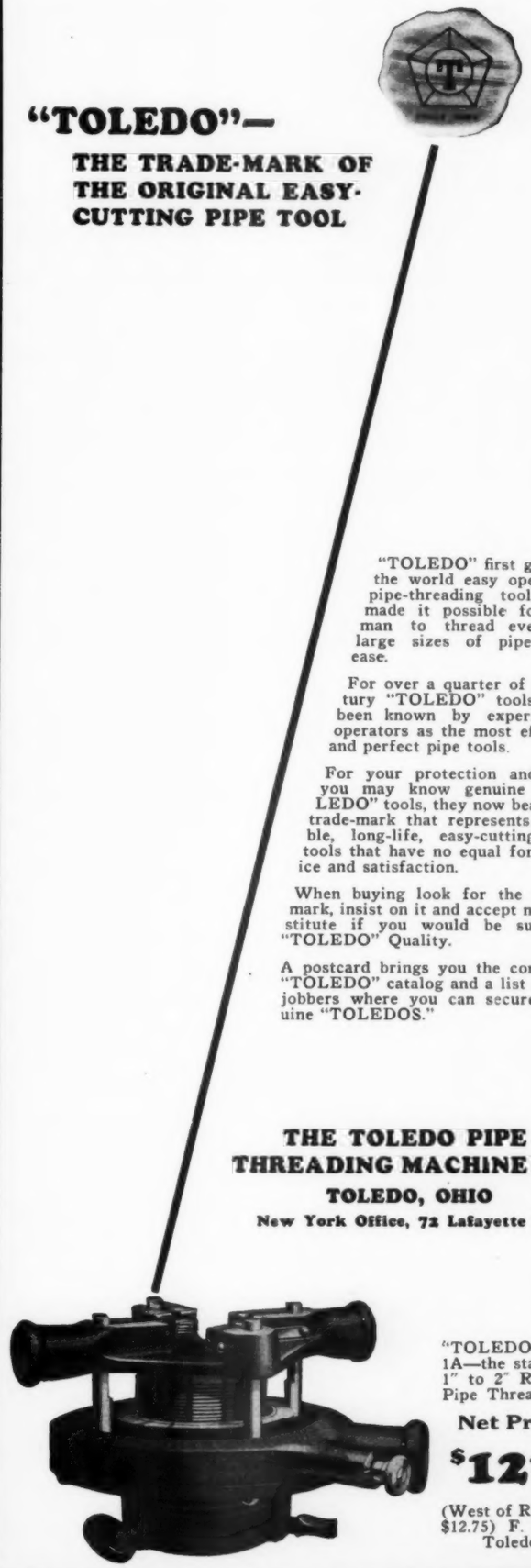

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## CRUDE PRODUCTION BY LEASES

(Continued from Page 89)

| Location— | Date of First Production— | Bonus Price | Number Wells | Total Prod. Bbls. |
|---|---|---|---|---|
| Laurel Oil & Gas Co.: | | | | |
| NW 1-26-5 | May, 1921 | 3,000 | 112 | 916,135 |
| Lorraine Petroleum Co.: | | | | |
| SE 6-26-6 | February, 1922 | 100,000 | 16 | 517,020 |
| Midland Oil Co.: | | | | |
| SE 13-27-5 | April, 1924 | 1,580,000 | 16 | 627,504 |
| NW 15-26-6 | May, 1922 | 61,000 | 5 | 232,269 |
| NW 14-27-5 | May, 1924 | 1,990,000 | 16 | 466,733 |
| | Total | $ 3,631,000 | 37 | 1,326,506 |
| Marland Oil Co.: | | | | |
| NW 3-26-6 | November, 1926 | 34,000 | 2 | 18,457 |
| Phillips Petroleum Co. and Delmar Oil Co.: | | | | |
| SE 10-27-5 | June, 1923 | 41,000 | 16 | 2,659,878 |
| Mid-Kansas Oil & Gas Co.: | | | | |
| SE 35-27-5 | October, 1922 | 665,000 | 13 | 831,980 |
| SE 33-27-6 | April, 1922 | 115,000 | 3 | 101,445 |
| SE 15-27-5 | June, 1923 | 1,325,000 | 16 | 1,390,735 |
| NW 26-27-5 | June, 1924 | 670,000 | 11 | 463,043 |
| NW 32-26-6 | June, 1926 | 29,000 | 3 | 13,603 |
| SW 35-27-5 | August, 1926 | 12,000 | 1 | 8,985 |
| | Total | $ 2,816,000 | 47 | 2,809,791 |
| Phillips Petroleum Co.: | | | | |
| SE 2-27-5 | July, 1925 | 6,000 | 14 | 984,121 |
| NE 11-27-5 | March, 1925 | 335,000 | 16 | 827,506 |
| NW 12-27-5 | May, 1925 | 216,000 | 15 | 1,008,315 |
| SW 12-27-5 | February, 1925 | 335,000 | 16 | 1,172,800 |
| SW 17-27-6 | September, 1925 | 31,000 | 2 | 48,893 |
| SW 11-27-5 | May, 1924 | 1,765,000 | 16 | 2,199,156 |
| NE 35-27-5 | October, 1922 | 495,000 | 12 | 514,913 |
| NW 20-27-6 | June, 1924 | 75,000 | 6 | 97,070 |
| NW 23-27-5 | June, 1923 | 1,005,000 | 16 | 1,981,189 |
| SW 32-27-6 | October, 1921 | 305,000 | 16 | 1,022,167 |
| SE 11-27-5 | September, 1924 | 505,000 | 16 | 1,603,761 |
| NE 14-27-5 | September, 1924 | 225,000 | 16 | 264,898 |
| NE 12-27-5 | May, 1926 | 625,000 | 15 | 701,214 |
| NE 18-27-6 | September, 1924 | 54,000 | 16 | 736,450 |
| NE 2-27-5 | June, 1926 | 366,000 | 1 | 87,309 |
| SE 20-27-6 | July, 1924 | 24,000 | 7 | 197,373 |
| SW 7-27-6 | May, 1926 | 420,000 | 13 | 290,205 |
| SE 7-27-6 | May, 1926 | 222,000 | 8 | 493,374 |
| SW 21-26-6 | May, 1926 | 526,000 | 16 | 389,548 |
| SE 20-26-6 | May, 1926 | 110,000 | 8 | 72,806 |
| SW 1-27-5 | June, 1926 | 710,000 | 8 | 499,080 |
| NE 29-26-6 | January, 1927 | 50,000 | 1 | 1,992 |
| SE 1-27-5 | January, 1927 | 178,000 | 3 | 39,363 |
| NW 7-27-6 | November, 1926 | 455,000 | 11 | 171,438 |
| | Total | $ 9,038,000 | 268 | 15,405,541 |
| Phillips Petroleum Co. and Skelly Oil Co.: | | | | |
| NE 7-26-6 | May, 1922 | 155,000 | 8 | 281,775 |
| SE 23-27-5 | April, 1923 | 1,101,000 | 14 | 1,300,170 |
| NE 24-27-5 | March, 1923 | 1,245,000 | 16 | 2,107,061 |
| SW 24-27-5 | October, 1922 | 1,005,000 | 16 | 2,178,635 |
| NE 25-27-5 | June, 1922 | 1,325,000 | 16 | 858,286 |
| NW 25-27-5 | June, 1922 | 1,160,000 | 14 | 914,663 |
| SW 25-27-5 | February, 1922 | 6,100 | 10 | 859,546 |
| SE 25-27-5 | August, 1921 | 52,000 | 14 | 979,205 |
| SE 26-27-5 | November, 1922 | 805,000 | 13 | 638,790 |
| NE 26-27-5 | January, 1924 | 310,000 | 14 | 534,956 |
| SW 19-27-6 | September, 1922 | 1,585,000 | 16 | 1,945,872 |
| NE 29-27-6 | September, 1922 | 600,000 | 12 | 915,599 |
| NW 30-27-6 | April, 1922 | 663,000 | 16 | 816,465 |
| | Total | $10,022,100 | 179 | 14,331,623 |
| Prairie Oil & Gas Co.: | | | | |
| SW 15-26-6 | May, 1925 | 25,000 | 16 | 34,121 |
| SE 12-27-5 | May, 1925 | 300,000 | 16 | 819,611 |
| SW 8-27-6 | October, 1925 | 40,000 | 1 | 466,008 |
| NW 4-26-6 | October, 1921 | 360,000 | 16 | 1,126,555 |
| NW 10-26-6 | October, 1921 | 200,000 | 5 | 670,646 |
| SW 10-26-6 | December, 1921 | 200,000 | 5 | 504,545 |
| NE 30-27-6 | March, 1922 | 700,000 | 16 | 931,282 |
| SE 30-27-6 | December, 1921 | 250,000 | 16 | 737,484 |
| SE 32-27-6 | March, 1922 | 800,000 | 16 | 1,196,956 |
| SW 33-27-6 | April, 1922 | 600,000 | 16 | 809,459 |
| SW 13-27-5 | May, 1924 | 1,826,000 | 16 | 1,023,298 |
| | Total | $ 5,300,000 | 139 | 8,316,965 |
| Peters & Oliphant: | | | | |
| NW 17-27-6 | October, 1923 | 82,000 | 6 | 422,666 |
| NE 20-27-6 | January, 1927 | 8,000 | 1 | 3,381 |
| | Total | $ 90,000 | 7 | 426,047 |
| Producers & Refiners Corp. and Marland Oil Co.: | | | | |
| NE 16-26-6 | January, 1922 | 136,000 | 13 | 461,835 |
| Producers & Refiners Corp.: | | | | |
| NW 31-27-6 | November, 1920 | 2,100 | 16 | 1,506,214 |
| Roxana Petroleum Corp.: | | | | |
| SW 4-26-6 | February, 1921 | 251,000 | 12 | 1,127,748 |
| Roxana Petroleum Corp. and Marland Oil Co.: | | | | |
| NW 6-26-6 | April, 1921 | 6,600 | 15 | 589,312 |
| NE 36-27-5 | May, 1920 (discovery lease) | 2,000 | 14 | 1,664,654 |
| SE 36-27-5 | December, 1920 | 7,000 | 12 | 593,064 |
| | Total | $ 15,600 | 41 | 2,847,030 |
| Simons, Moore and others: | | | | |
| SW 1-26-5 | February, 1922 | 3,100 | 13 | 452,594 |
| NE 5-26-6 | April, 1921 | 800 | 16 | 1,247,765 |
| | Total | $ 3,900 | 29 | 1,700,359 |
| Seamans and others: | | | | |
| SW 17-26-6 | February, 1926 | 5,200 | 1 | 1,141 |
| Sinclair Oil & Gas Co.: | | | | |
| NE 1-26-5 | May, 1921 | 5,800 | 15 | 1,149,130 |
| NE 15-27-5 | June, 1923 | 800,000 | 16 | 1,672,570 |
| SW 36-27-5 | October, 1921 | 1,500 | 17 | 1,456,566 |
| NE 19-27-6 | March, 1923 | 615,000 | 16 | 567,746 |
| SW 20-27-6 | March, 1923 | 415,000 | 16 | 747,616 |
| SW 29-27-6 | March, 1922 | 650,000 | 16 | 967,878 |
| SE 29-27-6 | June, 1922 | 410,000 | 16 | 1,099,386 |
| NE 32-27-6 | March, 1922 | 600,000 | 16 | 1,098,222 |
| NW 33-27-6 | June, 1922 | 300,000 | 16 | 521,575 |
| | Total | $ 3,797,300 | 144 | 9,280,689 |
| Skelly Oil Co.: | | | | |
| NW 28-26-6 | December, 1926 | 415,000 | 9 | 70,837 |
| SW 2-27-5 | April, 1925 | 10,500 | 8 | 75,432 |
| SW 26-27-5 | July, 1924 | 395,000 | 5 | 115,131 |
| SW 23-27-5 | June, 1923 | 740,000 | 15 | 990,347 |
| NW 35-27-5 | July, 1924 | 205,000 | 4 | 84,027 |
| NW 2-27-5 | April, 1926 | 68,000 | 2 | 92,566 |
| | Total | $ 1,833,500 | 43 | 1,428,340 |
| Tidal Osage Oil Co.: | | | | |
| SE 4-26-6 | October, 1921 | 95,000 | 11 | 623,656 |
| SW 6-26-6 | February, 1921 | 206,000 | 16 | 811,763 |
| | Total | $ 301,000 | 27 | 1,435,419 |
| Tidal Osage and Carter Oil Co.: | | | | |
| SW 30-27-6 | August, 1921 | 26,000 | 16 | 1,870,652 |
| Twin State Oil Co.: | | | | |
| SW 18-27-6 | May, 1924 | 605,000 | 16 | 669,863 |
| NW 36-27-5 | February, 1921 | 800 | 7 | 264,770 |
| | Total | $ 605,800 | 23 | 934,633 |
| The Texas Company: | | | | |
| NW 18-27-6 | September, 1924 | 141,000 | 16 | 435,585 |
| NE 21-26-6 | March, 1925 | 99,000 | 15 | 570,512 |
| SE 21-26-6 | May, 1926 | 321,000 | 13 | 276,612 |
| NE 28-26-6 | December, 1926 | 243,000 | 7 | 53,562 |
| NE 3-27-5 | February, 1927 | 6,500 | 1 | 655 |
| | Total | $ 810,500 | 52 | 1,330,986 |
| | Total, Osage County | 58,801,100 | 1,891 | 112,157,012 |

### KAY COUNTY

| Location— | Date of First Production— | Number Acres | Number Wells | Total Prod. Bbls. |
|---|---|---|---|---|
| Comar Oil Co.: | | | | |
| S half SW 4-27-5 | | 80 | 1 | 5,061 |
| N half SW 10-27-5, May, 1923 | | 80 | 8 | 1,493,113 |
| N half SW 15-27-5, April, 1923 | | 80 | 8 | 1,303,407 |
| S half NE 21-27-5, April, 1923 | | 80 | 1 | 46,727 |
| Total | | 320 | 18 | 2,848,308 |
| Dye & Tomlinson: | | | | |
| S half SW 15-27-5, January, 1923 | | 80 | 8 | 1,091,960 |
| Mid-Kansas Oil & Gas Co.: | | | | |
| N half NE 21-27-5, March, 1923 | | 80 | 2 | 64,278 |
| N half SE 9-27-5, May, 1923 | | 80 | 8 | 2,014,241 |
| Total | | 160 | 10 | 2,078,519 |
| Phillips Petroleum and Skelly Oil: | | | | |
| W half SW 9-27-5, July, 1924 | | 80 | 1 | 17,746 |
| SE 16-27-5, April, 1923 | | 160 | 7 | 217,698 |
| W half NW 22-27-5, March, 1923 | | 80 | 4 | 262,479 |
| S half SW 22-27-5, June, 1925 | | 80 | 1 | 112 |
| E half NW 22-27-5, May, 1923 | | 80 | 8 | 877,411 |
| Total | | 480 | 21 | 1,375,446 |
| Twin State Oil Co.: | | | | |
| NW 15-27-5, April, 1923 | | 160 | 15 | 1,674,326 |
| Carter Oil Co.: | | | | |
| S half SW 10-27-5, June, 1923 | | 80 | 8 | 2,151,874 |
| SW NW 3-27-5, January, 1924 | | 40 | 3 | 134,891 |
| Total | | 120 | 11 | 2,286,765 |
| Mid-Continent Petroleum Co.: | | | | |
| NW 10-27-5, May, 1923 | | 160 | 16 | 1,956,668 |
| Gypsy Oil Co.: | | | | |
| W half NW 4-27-5, September, 1924 | | 80 | 1 | 1,491 |
| SE 4-27-5, May, 1923 | | 160 | 16 | 1,295,042 |
| E half NW and NE SW 16-27-5, May, 1923 | | 120 | 1 | 2,005 |
| Total | | 360 | 18 | 1,298,538 |
| Phillips Petroleum Co.: | | | | |
| N half and SE NW 3-27-5, May, 1924 | | 120 | 12 | 11,490 |
| NE and N half NW 9-27-5, August, 1923 | | 240 | 19 | 3,027,985 |
| S half SE 9-27-5, May, 1923 | | 80 | 8 | 1,549,449 |
| W half NE 16-27-5, August, 1923 | | 80 | 3 | 338,000 |
| Total | | 520 | 42 | 4,926,924 |
| Sinclair Oil & Gas Co.: | | | | |
| E half SW 9-27-5, May, 1923 | | 80 | 5 | 530,662 |
| George S. Bole: | | | | |
| E half NW 4-27-5, August, 1923 | | 80 | 3 | 539,458 |
| Laurel Oil & Gas Co.: | | | | |
| N half SW 4-27-5, August, 1923 | | 80 | 5 | 260,709 |
| Prairie Oil & Gas Co.: | | | | |
| S half NW 9-27-5, January, 1924 | | 80 | 4 | 365,089 |
| Pure Oil Co.: | | | | |
| E half NE 16-27-5, August, 1923 | | 80 | 4 | 407,668 |
| Roxana Petroleum Corp.: | | | | |
| NE 4-27-5, August, 1923 | | 160 | 8 | 535,679 |
| The Texas Company: | | | | |
| SW 3-27-5, October, 1923 | | 160 | 16 | 653,171 |
| Total, Kay County | | 3,080 | 204 | 22,829,890 |
| Grand total, Burbank Field | | | 2,095 | 135,986,902 |

## Southwest Division, Natural Gas Assn., In Dallas April 12

Preparations for the meeting of the Southwest Division of the Natural Gas Association of America in Dallas, Tex., April 12 and 13, indicate, Secretary George McQuaid reports that the meeting will be very interesting and valuable.

Frank L. Chase, of the Lone Star Gas Co., chairman of the committee on papers, has arranged for several papers by men who know their subjects that will be of timely interest. The discussion is to be a feature of the meeting, the subjects being arranged to fit the situation in the district.

Chairman N. C. McGowen, of Shreveport, La., has announced several committees which will make reports at the Dallas meeting. The chairmen so far named by Mr. McGowen follows: Technical and Research—F. L. Chase, Lone Star Gas Co., Dallas; Gas Distribution—W. F. Wright, Dallas Gas Co., Dallas; Gas Utilization—C. H. Waring, Kansas City Gas Co., Kansas City, Mo.; Commercial—R. S. Reading, Southwestern Gas & Electric Co., Shreveport, La.; Gas Measurement—E. A. Clark, Oklahoma Natural Gas Corp., Tulsa, Okla.; Gas Transportation—H. D. Hancock, Gas Service Co., Kansas City, Mo.; Standard Testing for Gasoline Content of Natural Gas—G. G. Oberfell, Hope Engineering & Supply Co., Tulsa.

The welcoming address is to be made by J. W. Everman, supervisor of public utilities of Dallas, the response by E. R. Brown, president of the Magnolia Petroleum Co., who is also president of the Chamber of Commerce of Dallas.

The meetings will be held at the Adolphus Hotel in Dallas all day April 12, closing at 1 o'clock p. m., April 13.

## EMPIRE CO. ANNOUNCES A RIVAL GAS LINE

(Continued from Page 40)

natural gas to such towns as Kansas City, Kans., Kansas City, Mo., Wichita, Hutchinson, Topeka, Kans., and Joplin, Mo., as well as to other cities now on the Empire system and that natural gas will be made available in communities not heretofore enjoying the use of natural gas for heating, cooking and industrial purposes.

At this time officials state it is not possible to make public the definite route the new line will take from the Amarillo district. Empire officials feel that gas reserves in this yet undeveloped territory are sufficient to supply the new line adequately and steadily for a period of from 15 to 20 years.

### Amarillo Would Keep Gas

AMARILLO, Tex., Mar. 19.—A fight to keep Panhandle gas in the Panhandle was launched here, when the Amarillo Real Estate Board named a committee to appear before the Texas Railroad Commission, and appealed to the West Texas Chamber of Commerce for support in a move to prevent piping of the gas to outside states.

Judge J. W. Crudgington, former member of the State Senate, was named chairman of the committee which will ask the Railroad Commission to deny permission to corporations proposing to pipe line gas from the Panhandle.

Announcement of the Empire Gas & Fuel Co.'s plan to build a line from the Panhandle to Kansas City, brought the conservation fight to a head.

In February, the Public Service Co. of Denver, Colo., a Doherty subsidiary, got a 20-year franchise from Denver on the proposition of piping gas from Amarillo there, and also serving Trinidad, Pueblo, Colorado Springs and possibly other Rocky Mountain centers. Plans for this line, estimated as costing $18,000,000, are now being perfected.

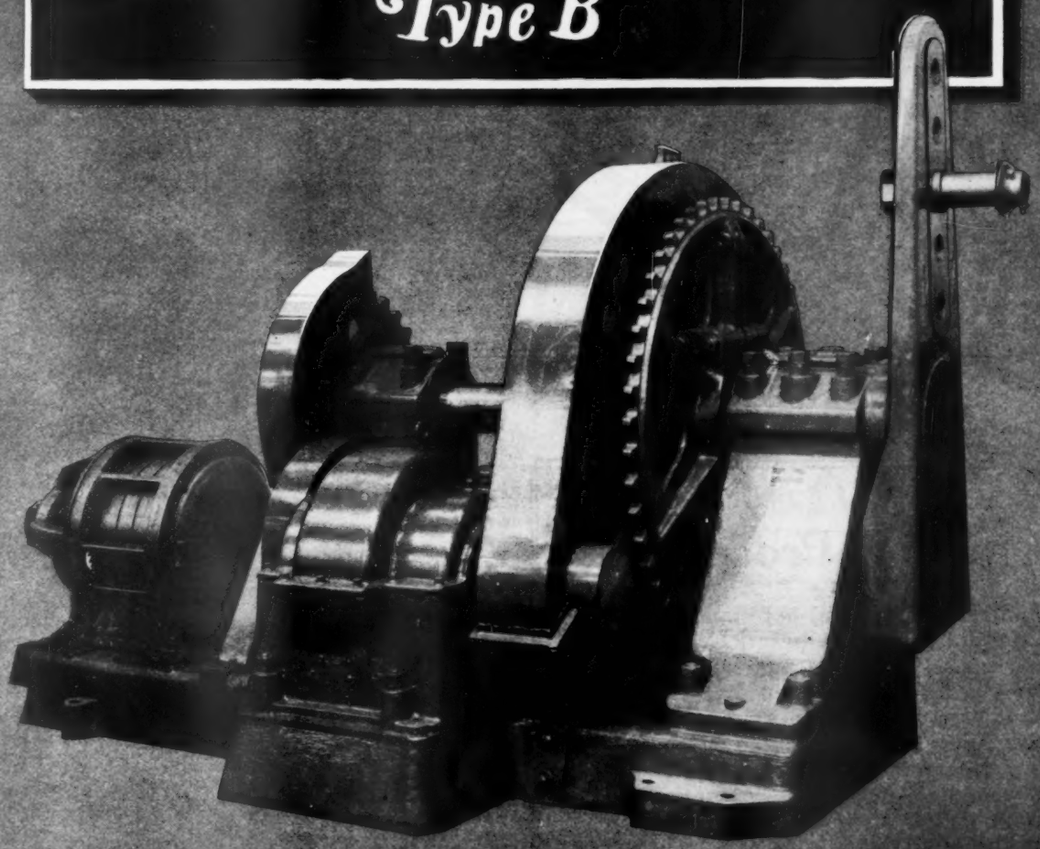
### WRONG CUT USED

In the advertisement of the National Supply Companies, appearing on Page 85 of the issue of March 17, the wrong cut was inadvertently picked up in our composing room to illustrate the equipment. The Ideal Crown Block Type "G" was shown instead of the Ideal Double Reduction Pumping Gear Type "B." The correct advertisement is shown on the page opposite this.

# IDEAL

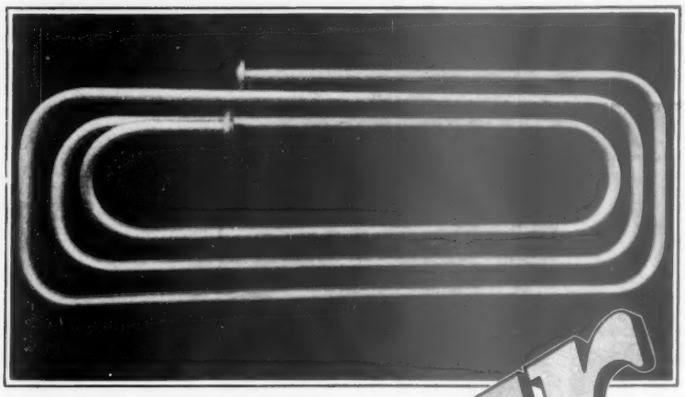
## DOUBLE REDUCTION PUMPING GEAR

*Type "B"*



THE NATIONAL SUPPLY COMPANIES


*(This is a corrected advertisement. See editorial notice opposite page for explanation.)*



*Condenser Box Coil for Refinery Gas Cracking Process*

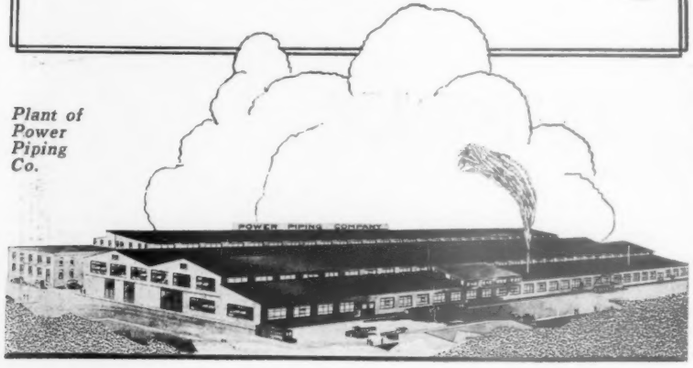
Power Piping

FOR EVERY OIL FIELD NEED

## Cracking Processes

often demand material not standard in design, dimensions or practice. When such requirements are put to "Power Piping" unfailing solution is assured. Behind every order, no matter what, Power Piping engineers can bring an experience that guarantees efficiency and economy—and positive satisfaction to you! We welcome inquiries from the oil industry!

**POWER PIPING COMPANY**
**Pittsburgh, Pa.**




*Plant of Power Piping Co.*

## SOUTHWEST TEXAS FIELDS

(Continued from Page 56)

to northwest lines and 150 feet to southwest lines, is drilling at 1,930 feet with no oil show yet.

**O'Hern & Seacord Pool**

Magnolia Petroleum Co.'s No. 1 Benavides, Block 486, located 300 feet to northeast and southeast lines, is drilling at 132 feet. Buffam and others' No. 1 Benavides, Block 38, located 150 feet to northeast and 175 feet to northwest lines, which was reported some time ago abandoned at 1,723 feet, is to be whipstocked and tested at 1,679 feet, total depth of the hole being 1,723 feet. O'Hern & Seacord's No. 1 Benavides, Survey 174, Block 12, discovery well of the pool, which is being deepened, is testing at 2,720 feet. O. W. Killam is moving on in Survey 585, southwest of the pool for No. 1 Bruni, located 600 feet to east lines and 150 feet to north lines. Moody Oil Corp.'s No. 1 J. Benavides, Mesquite ranch, Block 40, Subdivision 1, located 150 feet to northwest and southwest lines, has been spudded in.

**Piedras Pintas Dome**

Gulf Production Co.'s No. 1 Tinney, Survey 8, located 800 feet to south line and 100 feet to west line, is pulling liner at 3,650 feet to deepen. Humble Oil & Refining Co.'s No. 1 Walsh, Survey 185, located 700 feet to west line and 650 feet to south line, is milling, with hole to be reworked at 2,939 feet.

**Randado Field—Jim Hogg County**

Grayburg Oil Co.'s No. 16 Weil, Survey 81, Block 9, located 150 feet to north and east lines, is drilling at 1,100 feet; No. 17 Weil, same block and survey, at 150 feet to north line and 450 feet to east line, is rigging up. Magnolia Petroleum Co.'s No. 20 Merchants State Bank, Survey 415, located 450 feet to west line and 700 feet to north line, has been spudded in. Livingston-Ritchson's No. 1 Palacious, Survey 287, Block 18, located 2,000 feet east of the line of production of the field, is drilling at 1,150 feet. The Texas Company has made location for No. 2 Weil, in Survey 81, Block 1, at 150 feet to SW cor. Magnolia Petroleum Co.'s No. 20 de la Garza, Survey 291, Block 7, located 450 feet to SW cor., reported last week as abandoned at 1,304 feet at which depth it tested salt water, is drilling deeper at 1,365 feet.

**Henne, Winch and Fariss Pool**

Magnolia Petroleum Co.'s No. 21 Martinez, Survey 276, located 1,400 feet to east line and 2,150 feet to north line, total depth 2,048 feet, at which depth casing collapsed, is being plugged to abandon; No. 26 Martinez, Survey 276, located 2,050 feet to east line and 2,700 feet to west line, is testing at 2,009 feet; location has been made for No. 27 Martinez, Survey 276, at 1,750 feet to east line and 2,525 feet to north line; No. 34 Martinez, Survey 256, Block 15, at 350 feet to north line and 450 feet to west line, is drilling at 1,925 feet; location has been made in same block and survey at 400 feet to west line and 150 feet to south line, for No. 35 Martinez.

**Kitselman and St. Albans Field**

Edward St. Albans' No. 5 Lopez, Share 1, Block 7, located 1,100 feet to west line and 150 feet to south line, is testing at 2,138-42 feet; No. 6 Lopez, Share 1, Block 7, located 500 feet to south line and 450 feet to east line, is moving on. K. & S. Corp.'s No. 57 Holbien, Survey 17, Block 40, located 330 feet to NE cor., is drilling at 800 feet. Associated Oil Co.'s No. 3 Martinez, Share 1, Block 18, located 800 feet to west line and 150 feet to north line, is testing at 2,141-42.5 feet. Edward St. Albans' No. 1 Holbien, Block 38 Hogg Ridge, Share 3, at 150 feet to NW cor., is drilling at 1,700 feet.

**Alworth Pool**

Magnolia Petroleum Co.'s No. 19 Merchants State Bank, Survey 236 located 450 feet to south line and 150 feet to west line, at 1,051 feet test water and oil, there being 600 feet of salt water to 20 feet to oil in the hole. Alworth Brothers' No. 3 M. Garcia Survey 39, Block 4, located 490 feet to northwest lines and 150 feet to southwest lines, has set casing at 1,030 feet.

**Schott Pool—Webb County**

Jones and others' No. 3 Garcia, Survey 463, located 150 feet to NE cor., is ready to spud in. Magnolia Petroleum Co.'s No. 6 Garcia, Survey 58, located 1,990 feet to west line and 440 feet to north line, is drilling at 1,060 feet.

**Aviator or Bruni Tracts**

Ball and others have derrick up for No. 1 Puig, Block 58, at 150 feet to SW cor.; No. 4 Puig, Block 74, the deep test, located 150 feet to SE cor., at 3,812 feet bailed within 500 feet of bottom without finding any oil. Edward St Albans' No. 2 Puig, located in 60 acre lease of Evans tract, is moving on. This is located near No. 1 Puig, a wildcat which made 25 bbls. at 1,862 feet and the Straight Eight well, which also made small amount of oil. Killam-Maddox' No. 1 Bruni, Block 65, at 1,170 feet to south line and 150 feet to west line, at 2,137-44 feet showed gas through Halliburton tester. Crown Central Petroleum Corp.'s No. 21 Bruni, Block 44 510 feet to east line and 770 feet to north line, is standing at 1,734 feet. H. E. Neal's No. 1 Bruni, Block 41, at 150 feet to NW cor., is drilling at 300 feet. Sun Oil Co.'s No. 14 Bruni, Block 45, east half at 2,050 feet to north line and 200 feet to west line, is drilling at 1,634 feet.

**Mirando Valley Pool**

O. W. Killam has made location for No. 1 Puig, in 160 acre lease of Kirkpatrick tract, Puig ranch, 150 feet to NE cor. J. L. Johnson and others' No. 1 Anderson, Survey 2,363, Block 6, at 150 feet to SW cor., is drilling at 1,550 feet. R. F. Duggan's No. 1 E. Garcia, Survey 608, Block 2, located 150 feet to SE cor., is standing at 2,300 feet. Crown Central Petroleum Corp.'s No. 10 Garcia, Survey 603, Block 56, located 150 feet to west line and 110 feet to north line, total depth 4,751 feet is being plugged back. Cornhuskers Oil Co.'s No. 6 Garcia, Survey 605, is making location for test.

**Caroline-Texas Field**

Associated Oil Co.'s No. B-3 Webster, SE NW NW Survey 684, is standing at 2,604 feet with hole filled with mud. M. & N. Drilling Co.'s No. 1 Vela, Survey 1,012, Block 12, located 200 feet to northeast and southeast lines, is coring at 2,030 feet. Daniel & Best's No. 1 Webster, NW NE NW, Survey 684, is standing at 2,076 feet with suit filed to recover lease. T. P. Morgan's No. 1 de la Garza, Survey 335 Block 23, located 150 feet to SE cor., is fishing for drill stem. Barnsley-Chicago Syndicate's No. 1 de la Garza, Survey 335, Block 19, is drilling at 2,800 feet.

**Luling Field—Caldwell County**

North & South's No. 1 Kelly, deep test, is drilling at 6,500 feet; No. 1 Tiller, another deep test, is drilling at 5,900 feet. Magnolia Petroleum Co.'s No. 20 M. Moore, Henry Survey, 300 feet southwest of No. 12, is drilling at 1,660 feet; No. 27 W. H. Tabor, Reaville Survey, 300 feet northwest of No. 4, is drilling at 100 feet; No. 17 Alf Mercer, Reaville Survey, 800 feet northwest of No. 9, is rigging up; No. 15 A. H. Shubert is rigging up; No. 23 Martinez, H. Cottle Survey, 500 feet northeast of No. 20, at 2,137 feet made 25 bbls. F. G. Bumberg's No. 1 Angelke, Cottle Survey, Block 7-8, 450 feet to northeast lines and 184 feet to northwest lines, is at 2,135 feet showing oil and water.

**Rockdale Field—Milam County**

Noack & Laning are rigging up on the Poor Boy Oil Co. block of leases, offsetting producers of the Gaither Production Co. Coffield & Hale's No. 1 John Hicks, located within the city limits of Rockdale, is drilling at 300 feet. Noack Oil Co. has set casing in No. 3 J. B. R. Smith and is getting ready to set casing in No. 4 J. B. R. Smith. Henry Davis' No. 3 Billy Smith is to be drilled in within a few days. W. T. Ramsel Oil Co.'s No. 3 Gohman is spudding, offsetting a good producer. Gaither Production Co.'s No. 7 Gaither at 1,206 feet completed making 6 bbls. Chicago Oil & Land Co. has made location for No. 4 Gambil, Thompson Survey, 300 feet east

# Sunk *in the* Ground

## where *corrosion* works unseen

*Buried steel tanks and underground pipe lines should be carefully painted before being buried. The paint should have time to dry thoroughly.*

### *Three coats of pure red-lead most practicable method of protecting buried steel*

STEEL buried in the ground is threatened by unusual danger from corrosion. The surrounding earth is nearly always damp. Ground water is a constant menace to the metal.

Under most conditions, the most feasible method of protection is a three-coat covering of pure red-lead. Paint made of red-lead adheres closely to steel. It is moisture-proof. It is not affected by the chemical substances ordinarily found in ground water. It offers durable, economical protection.

Where the soil condition is strongly alkaline, of course no paint is suitable. In such a case, the oil vehicle of the paint will be turned to soap.

#### *Protecting buried tanks*

Tanks sunk in the ground are sometimes protected as follows: Three coats of red-lead are applied. The tank is then buried in sand, which acts as a filter. In damp soil, a metal tank so treated will last for many years without further attention. In dry soil it will last even longer.

#### *Oil men make this choice*

A questionnaire showed that oil men in every field in the United States favored red-lead for metal protection. 53 oil men answered. Thirty-two (or 3 out of 5) are red-lead users.

Dutch Boy red-lead was preferred by many of these oil men. Dutch Boy red lead is pure, uniform in quality. You can get it in either paste or liquid form. The liquid comes in the orange-red for next-to-metal coats and in greens, browns and black for finishing coats. The paste comes in the orange-red and can be shaded to dark colors.

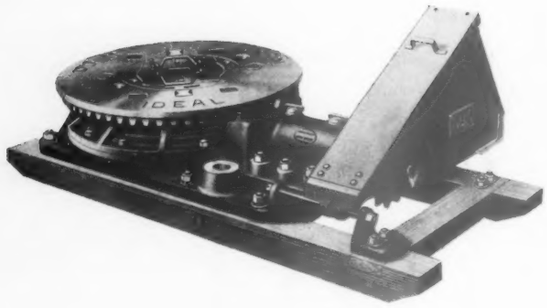
Tanks and tank cars painted in light colors guarantee a large yearly saving in oil. Dutch Boy white-lead is ideal for reducing evaporation losses in this manner. And used over an undercoating of Dutch Boy red-lead it not only cuts your evaporation losses to a minimum, but gives the same weather protection.

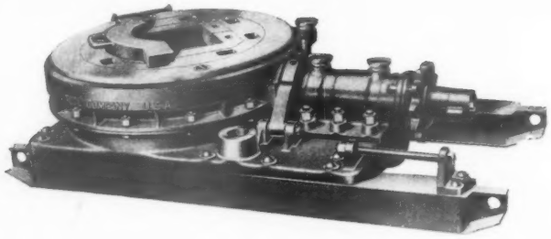
We shall be pleased to help you solve any question of metal protection. Our technical staff have made a study of paint for the oil industry. Their knowledge is thorough. Their assistance is free of charge. Address our nearest branch.

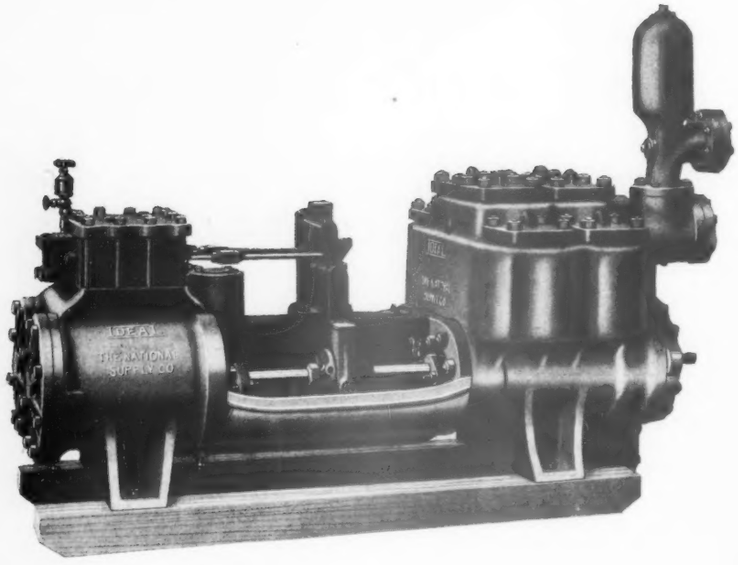
NATIONAL LEAD COMPANY

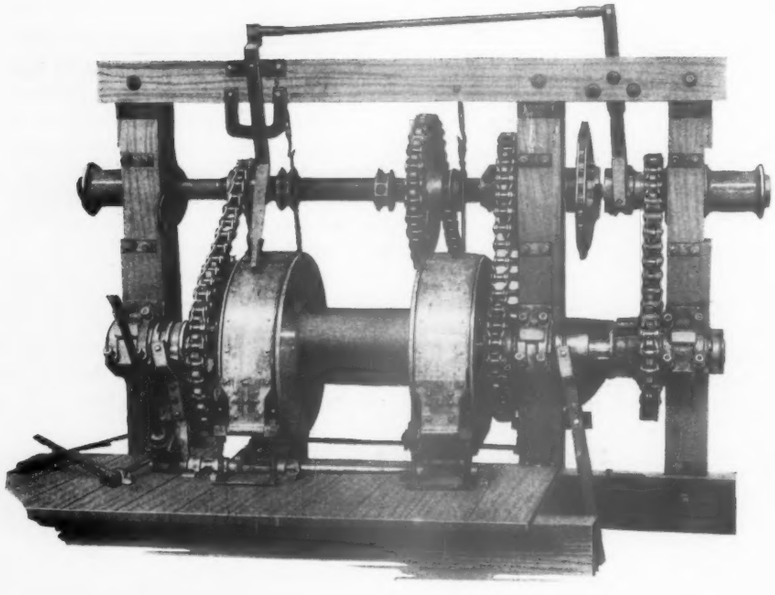
New York, 111 Broadway · Boston, 800 Albany Street
Buffalo, 116 Oak Street · Chicago, 900 West 18th Street
Cincinnati, 659 Freeman Avenue · Cleveland, 820 West Superior Avenue · St. Louis, 722 Chestnut Street · San Francisco, 485 California Street · Pittsburgh, National Lead & Oil Co. of Penna., 316 Fourth Avenue · Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

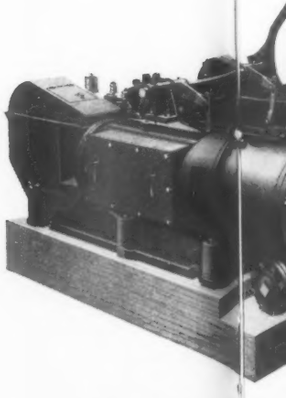
# DUTCH BOY RED-LEAD





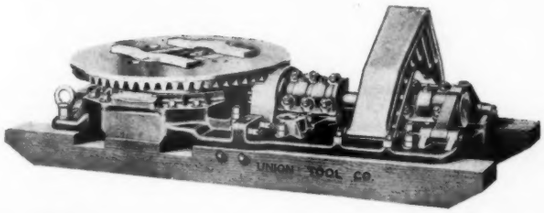


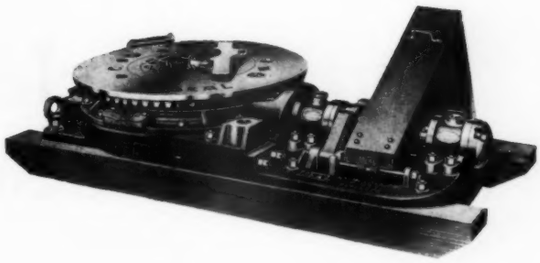
IDEA

ROTARY DR

*Equip*

THE NATIONAL SU



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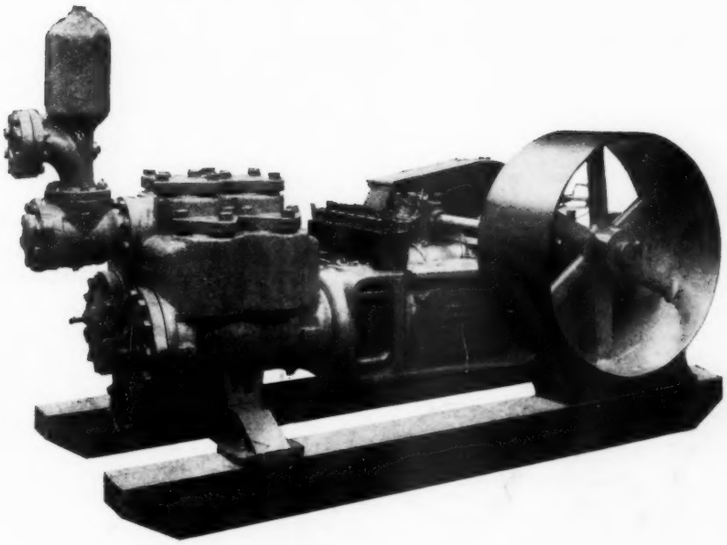

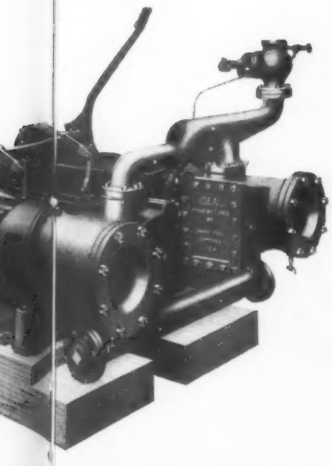

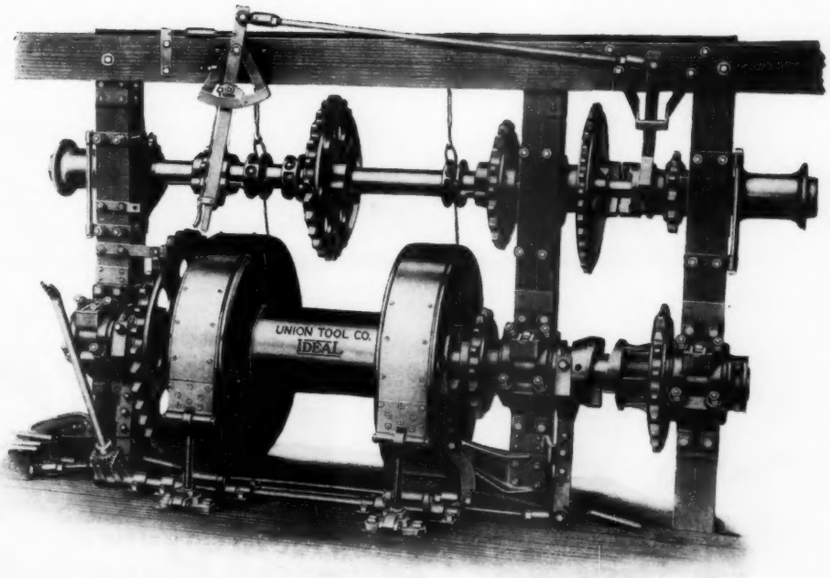


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*Stocks of Oakite Materials are carried in these cities.

PRODUCERS, refiners and marketers will find it pays to use OAKITE materials and methods for cleaning—

| | | |
|---|---|---|
| Storage tanks | Drums | Filter cloths |
| Tank cars | Barrels | Salvage parts |
| Tank steamers | Cans | Pipe fittings |
| Motor trucks | Test bottles | Tools |

For OAKITE cleaning methods are the SAFEST! Also the most economical to use.

OAKITE materials are non-inflammable, non-combustible, non-explosive. Fire hazard, which is ever present in cleaning with inflammable distillates is entirely eliminated!

And important, too, is the fact that it *costs less to clean with* OAKITE. Time, labor and material are reduced. More and better cleaning is done in a given time. Handling is simplified. Waste effort eliminated.

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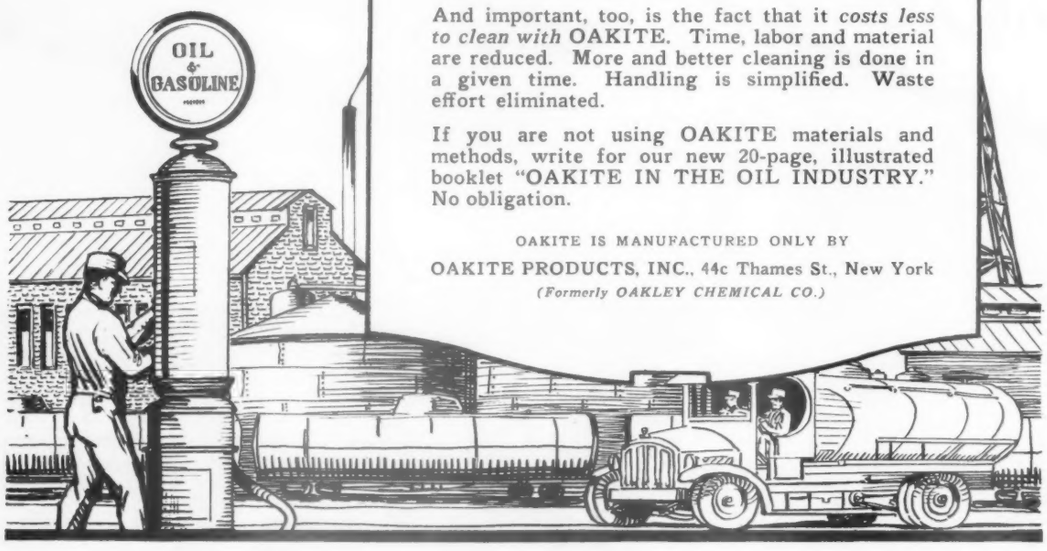


# OAKITE

TRADE MARK REG. U.S PAT. OFF.

***Industrial Cleaning Materials and Methods***

of No. 2. Fritz Fuch's No. 2 Lon Hudson, T. S. Arnett Survey, is drilling at 900 feet, and location has been made in the same survey at 300 feet west of No. 1, 150 feet to NE cor., for No. 3 Lon Hudson. Rockdale Development Co. has made location for No. 4 Lorenz, Thompson Survey, 300 feet south of No. 3. Chicago Oil Co. had made location in Thompson Survey, 300 feet north of No. 2 for No. 3 Gambill. Noack Oil Co. has made location for No. 3 Seelke, T. J. Chambers Survey, 300 feet southeast of No 2. Rockdale Development Co. has spudded in No. 1 Lon Hudson, NW cor. Bartlett Brothers' No. 3 Kevil has been abandoned dry. E. H. Noack's No. 2 Phillips-Perry has been abandoned dry. Clear Lake Oil Co.'s No. 1 Arnold, southern extension of the field, is preparing to be drilled in.

**Kingsville Field—Kleberg County**

Humble Oil & Refining Co. has made location for No. 3 King, 500 feet north of No. 2 King and east of Cayo Del Grullo; location has been made for No. A-3 Dennett, NW cor. Lot 2, Section 39, and for No. 1 Kivlin in NW cor. Lot 5, Section 39; No. 1 Kleberg-Trustee, NE cor. Lot 8, Section 40, is setting 10-inch casing to 2,800 feet; No. 3 Kleberg-Trustee, NW cor. Lot 1, Section 40, at 2,275 feet got gumbo and shale, but no sand and is drilling deeper; No. B-1 Dennett is rigging up to deepen, total depth 2,280 feet. J. E. Walsh is spudding in No. 1 Walsh, Lot 29, King land, 1,280 feet to Humble's No. 2 State on the east. A. C. Erwin's No. 1 Kivlin (fee) Lot 7, Section 50, located 660 feet to SE cor. is shut down at 710 feet.

## LOUISIANA-ARKANSAS

(Continued from Page 61)

cates' No. A-9 Murphy, Section 15-16-15, was completed at 2,614-19 feet, pumping 20 bbls.

Recent crude slashes and those affecting Smackover have not been reflected in field operations of Smackover. A slight increase was noted in wells actually drilling. W. H. Gilliland's No. B-1 Hodges, Section 1-16-17, is drilling at 2,302 feet. Ten-inch was set at 295 feet and Gulf Refining Co.'s No. 23 T. C. Murphy, Section 9-16-15, is drilling at 981 feet. Humble Oil & Refining Co.'s No. B-2 Flenniken, Section 9-16-15, is drilling sand at 2,555 feet. Same company's No. 6 Goodwin, Section 20-17-16, on the southwest edge of Lisbon, tested dry in the Nacatoch sand at 2,191-95 feet and will be drilled deeper. Four and one-half-inch casing was cemented at 2,761 feet and Imperial Oil & Gas Co.'s No. 4 Murphy, Section 9-16-15, is being bailed to test the 2,750-foot sand at 2,762-78 feet.

Imperial Co.'s No. 5 Murphy, Section 9-16-15, is drilling at 2,552 feet. Keen & Woolf Oil Co.'s No. 4 Murphy, Section 9-16-15, tested 3,000,000 feet of gas spraying b.s. from 10 feet of sand topped at 2,640 feet and is shut in for orders. Arrangements are being made to set 4½-inch casing at 2,715 feet at Louisiana Oil Refining Corp.'s No. B-3 Murphy, Section 9-16-15. Six-inch casing is being set at 2,391 feet at Lion Oil & Refining Co.'s No. A-9 Flenniken, Section 10-16-15. Lion Co.'s No. 2 Hardy-Murphy, Section 9-16-15, formerly completed at 2,409 feet flowing 300 bbls., is being rigged to drill deeper. Lion Co.'s No. 6 Hardy-Murphy, Section 9-16-15 is waiting for a standard rig at 2,692 to 2,702 feet. Same company's No. D-7 Murphy, Section 8-16-15, tested dry at 2,777 feet and is being cored at 2,779 feet.

Magnolia Petroleum Co.'s No. 6 Childs, Section 8-16-16, is to be abandoned at 3,000 feet in red gumbo. A derrick is up for Magnolia Co.'s No. 3 J. Murphy, 124 feet south and 150 feet west NE cor. SW NW SW, Section 8-16-15. A derrick is up for the same company's No. 9 T. C. Murphy, 200 feet north and west SE cor. SW SW, Section 8-16-15. Magnolia Co.'s No. 1 Nicholas Childs, Section 8-16-16, tested salt water at 2,653 feet and is shut down at 2,700 feet because of high water. Same company's No. 4 Saxon, Section 5-16-16, is drilling at 1,450 feet. Mounts and associates' No. 6 Pratt, Section 8-18-15, is drilling at 253 feet. O. G. Murphy's No. 6 T. C. Murphy, Section 9-16-15, formerly abandoned at 2,445 feet, is being rigged to drill deeper. Ten-inch was set at 120 feet and National Consolidated Petroleum Co.'s No. 2 Fagg, Section 8-16-16, is drilling at 1,800 feet.

Natural Gas & Fuel Corp.'s No. 4 Flenniken, Section 8-16-15, is drilling at 2,440 feet. Same company's No. F-1 Murphy, Section 9-16-15, is being bailed to test sand at 2,757-67 feet. Arrangements are being made to test sand at 2,418-26 feet at Peer Oil Corp.'s No. B-7 Palmer, Section 9-16-15. The plug at 2,391 feet is being drilled at A. H. Ramage's No. C-11 Lawton, Section 10-16-15. A derrick pattern is on location for Stewart and associates' No. 8 Murphy, 450 feet south and 150 feet east NW cor. E half NE SW, Section 9-16-15. The casing cemented at 2,349 feet was bailed dry and Sun Oil Co.'s No. 20 Hays, Section 3-16-15, is to be drilled in with cable tools. Unity Petroleum Co.'s No. 1 Murphy, Section 2-16-15, is drilling at 2,569 feet.

**Ouachita County**

In the northeastern part of Smackover, Simms Oil Co.'s No. 7 J. E. Murphy, Section 28-15-15, was completed at 2,614-19 feet, pumping 40 bbls. and in the Stephens Field, two wells were completed. Wesson and associates' No. 1 Pelican, Section 22-15-19, is a 7-bbl. pumper in sand at 2,153-58 feet and Magnolia Petroleum Co.'s No. 1 Gosden, Section 15-15-19, is a 10-bbl. pumper in sand at 2,191 to 2,201 feet.

H. E. Clark's No. 3 Shirey, Section 36-15-17, has 230 feet of oil in the hole from sand at 2,282 to 2,307 feet and is waiting for a standard rig. Gulf Refining Co.'s No. 10 R. Bennett, Section 33-15-15, is drilling at 2,164 feet. Same company's No. A-25 Umsted, Section 33-15-15, is drilling at 2,055 feet. The liner is being set to test 6 feet of sand topped at 2,284 feet at Keever and associates' No. 1 Hicks, Section 27-15-16. Casing cemented at 2,248 feet is being bailed at Magnolia Petroleum Co.'s No. 4 H. Smith, Section 36-15-17. Marine Oil Co.'s No. 11 Umsted, NW cor. E half, Lot 1, NE, Section 5-16-15, is a rig. The plug at 2,250 feet is being drilled at Middlesex Oil Co.'s No. 4 Shirey, Section 36-15-17. Six-inch casing is to be set at 2,394 feet at Texas Pacific Coal & Oil Co.'s No. 9 Laney, Section 31-15-15. Eight and one-quarter-inch casing was cemented at 1,542 feet at Magnolia Petroleum Co.'s No. 2 Gosden, Section 15-15-17. Ten-inch casing was set at 60 feet and Wasson and associates' No. 1 Culp, Section 22-15-19, is drilling at 1,570 feet.

**Columbia County**

Arkansas Fuel Oil Co.'s No. 1 Barge, Section 14-18-22, is drilling shale at 3,085 feet. Columbia Oil Syndicate's No. 1 Whitehead, Section 14-19-23,, tested salt water at 2,209 feet and is drilling at 2,210 feet.

**Nevada County**

Six-inch casing was cemented at 1,201 feet at Autrey Oil Co.'s No. 2 McKinney, Section 9-14-21. Fruen and associates' No. 1 Rhodes, Section 22-12-21, is shut down at 1,900 feet. Eight-inch casing was cemented at 1,188 feet at Holmes and associates' No. 1 Wallace, Section 11-14-21. Humble Oil & Refining Co.'s No. 4 Bodcaw, Section 9-15-22, is being reamed to the bottom at 3,395 feet. Six-inch casing was cemented at 1,154 feet at Martin and associates' No. 1 Haynie, Section 6-14-20.

## GULF COAST FIELDS

(Continued from Page 54)

tions; No. 4 Farquahar "A," at 4,350 feet; No. 8, at 1,200 feet; No. 1 Farquahar and others, at 4,275 feet; No. 4 Bordages, at 4,550 feet; No. 2, at 5,400 feet.

**Miscellaneous (Coastal Texas)**

Brazoria County—Allen Dome: Roxana Petroleum Corp.'s No. 3 Allen, pulling the screen set at 5,336 feet, bailed a little oil; No. 2 Reese, drilling at 1,010 feet; No. 2 San Bernard River, at 4,439


# SPECIAL Refinery Equipment

## BUBBLE TOWER CASTINGS

We are especially equipped and thoroughly experienced in the manufacture of castings for Bubble Towers.

## WESTERN RIVER CLAMPS

fit flush and tight with pipe. Are smooth clean castings. They take the strain off the weld or coupling and prevent joints from breaking. Prompt shipment on standard sizes for pipe up to 16 inches.

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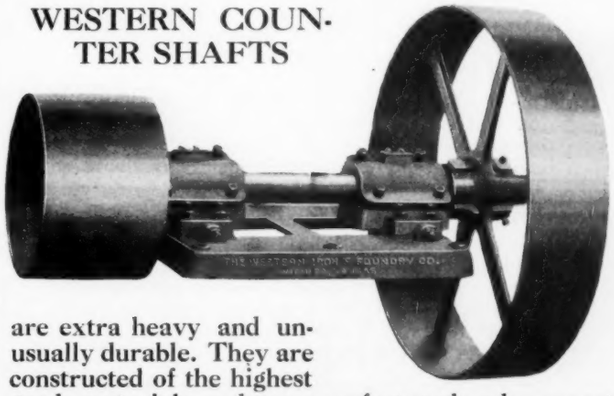

are extra heavy and unusually durable. They are constructed of the highest grade materials, and are manufactured under expert supervision. Will withstand the severest strains. Carried in stock in all standard size pulleys and shafts; with end bearings, if preferred.

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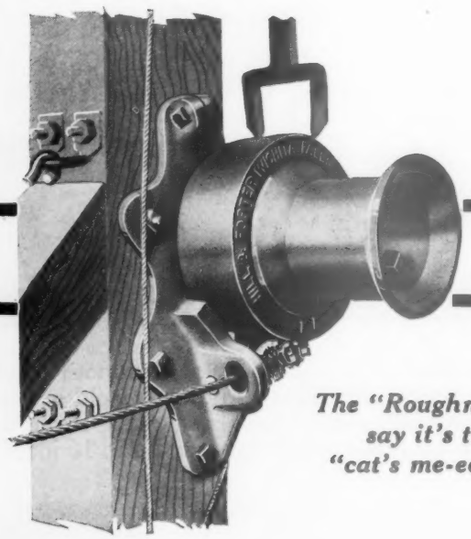
WICHITA, KANSAS

# HILL & FOSTER AUTOMATIC CATHEAD



*The "Roughnecks" say it's the "cat's me-eow" !*

**—ENDURANCE**

This is accomplished, first, by its simple construction and sturdiness of all its parts; second, by thorough lubrication. A reserve of six cubic inches of Alemite grease is made available to every working part at each oiling.

**—SAFETY**

It is safe, because it stands idle on a stationary bushing, free from the shaft, until put into operation by the driller, and because it automatically disengages itself when a definite, jerk-line movement of four feet is made.

**—EASE OF OPERATION**

Ask any crew using one. They tell us "It couldn't be better," "It does all any cathead could do," "It's perfect."

*Our Guarantee Is That You Will Be Pleased*

THESE LETTERS FROM TWO OF OUR USERS SPEAK VOLUMES

MAGNOLIA PETROLEUM COMPANY

Wewoka, Okla., Feb. 26, 1927.

To Whom It May Concern:

I have been using Hill & Foster Cat Heads in this district for about six months and cannot say enough for their performance. It does the job so quietly and easily that you hardly realize the joint is broken.

There seems to be very little wear on the Cat Head.

It is a safety device and also a time saver worthy of consideration. None of the seven I am using has ever caused any trouble or delay.

Very truly,

*(Signed)* ALBERT W. SHAW,
Foreman, Magnolia Drilling Tools.

Tulsa, Okla., October 23, 1926.

To Whom It May Concern:

This is to certify that we have had installed a Hill-Foster Cat Head on one of our Rotary drilling rigs, about two weeks.

Without a doubt it is the best one on the market today, in fact the only one we would have at any price.

We think so much of it that we are installing them on our rigs on account of the positive action and safety at all times. It cannot foul, there are few working parts and will last indefinitely without any repairs.

CUNNINGHAM & McGRANAHAN,
By W. H. Cunningham.

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HILL & FOSTER OVERSHOT GUIDE


feet. Clemens Dome, 2½ miles north of Allen Dome: Roxana Petroleum Corp.'s No. 2-A Pabst, drilling below 4,010 feet; No. 4 Clemens, around 3,515 feet. Stratton Ridge Dome: Pierce Oil-Humphrey's joint No. 1 Armstrong, drilling 565 feet. The Texas Company's No. 4 Hunt, east of Pledger, abandoned at 1,380 feet.

Matagorda County—Hawkins Dome: Gulf Production Co.'s No. 8 Craig, drilling below 4,100 feet; No. 2 Parkinson, at 1,205 feet. Shepherd Mott Oil Co.'s No. 2 Murphy, idle.

Jefferson County—Fannette Dome: Gulf company's No. 10 Thomas, drilling below 500 feet. No. 2 Bordages, at 4,849 feet, and No. 3 Bordages, beow 2,970 feet. Miller Drilling Co.'s No. 1 Edwards, near Nederland, is around 3,670 feet.

Fort Bend County—Long Point Dome: Gulf Production Co.'s No. 24 Davis is below 710 feet. Same No. 4 Beard is at 1,675 feet. No. 2 Trove is rigging. No. 1 Wolf is below 800 feet.

Austin County—Raccoon Creek district: Humble Oil & Refining Co. and Valley Oil Co.'s joint No. 2 College, drilling below 1,690 feet; joint No. 3 College drilling below 600 feet; joint No. 2 Thompson is at 970 feet, and No. 2 Reese at 940 feet with gas showing. No. 1 Bellville, setting liner to cut off water at 1,040 feet.

Boling Pool: The Texas Company's No. 2 Felder is at 4,100 feet; No. 2 Farmer, below 2,900 feet. Sun Oil Co.'s No. 2 Farmer is around 2,370 feet.

**Coastal Louisiana**

Gulf Refining Co.'s No. 1 Z State Land, Eagle Point Dome, Iberia Parish, is setting strainer to test at 1,162 feet.

The Union Sulphur Co.'s No. 720 fee, Sulphur Dome, Calcasieu Parish, is in a water sand at 3,357 feet.

At Hackberry Dome, Cameron Parish, the Yount Lee Oil Co. has locations for two tests, and the Union Sulphur Co. for Nos. 2 and 3 Gulf, No. 2 Bell and No. 3 Vincient.

## ROCKY MOUNTAIN AREA

(Continued from Page 63)

| | |
|---|---|
| Salt Creek | 46,390 |
| Teapot | 830 |
| Big Muddy | 2,870 |
| Grass Creek | 2,850 |
| Lance Creek | 750 |
| LaBarge | 300 |
| Poison Spider | 190 |
| Osage | 350 |
| Hamilton Dome | 1,350 |
| Lander | 360 |
| Byron | 40 |
| Lost Soldier | 3,640 |
| Ferris | 80 |
| Simpson Ridge | 50 |
| Cat Creek | 2,390 |
| Lake Basin | 190 |
| Sunburst | 12,000 |
| Iles | 45 |
| Florence | 600 |
| Moffat | 2,525 |
| Tow Creek | 820 |
| Fort Collins | 3,930 |
| Boulder | 25 |
| Rangeley | 100 |
| Walden | 320 |
| Hogback | 800 |
| *Rattlesnake | 1,590 |
| Artesia | 2,000 |
| Total | 91,395 |

*Rattlesnake runs now include Table Mesa.

## KANSAS FIELDS

(Continued from Page 52)

shot with 10 quarts in sand at 3,123-28 feet. Magnolia Petroleum Co.'s No. 1 Stern, NE cor. SE NE, Section 33-27-6, is producing 180 bbls. from sand at 3,078-80 feet. Phillips Petroleum Co.'s No. 1 Parker, NE cor. SW NW, Section 13-27-7, in the Keighley area, made 150 bbls. when shot with 80 quarts in sand at 2,643-78 feet. No. 5 P. Seward, SW cor. NW NW, Section 13-27-7, was good for 150 bbls. from sand at 2,643-77 feet after it was shot with 80 quarts. Sinclair Oil & Gas Co.'s No. 2 Harris, SE cor. SW, Section 14-27-7, had sand at 2,647-97 feet and after a shot of 200 quarts made 150 bbls. B. G. & M. Oil Co.'s No. 1 Ramp, NE cor. NW NW, Section 26-28-7, is a 20-bbl. well producing from sand at 2,428-72 feet after a shot of 70 quarts.

**Chase County**

Empire Gas & Fuel Co.'s No. 1 Cannon, SW cor. NE NW, Section 15-21-9, is a dry hole at 3,130 feet.

**Chautauqua County**

Griffith, Bell and others' No. 2 Oliver, C SW NW, Section 1-32-10, is producing 25 bbls. from sand at 1,655-84 feet.

**Coffey County**

Balierre and others made location for No. 1 Talbert, C SW SW, Section 20-21-14, west of Burlington. Harper and others' No. 1 Peek, SE cor. SW SW, Section 16-23-14, east of Gridley, is drilling at 375 feet.

**Cowley County**

Pattee, Tyrell and others have the rig up for No. 1 Townsite, Lot 5, in the Winfield Pool, Section 22-32-4e. Tidal Oil Co. and Skelly Oil Co.'s No. 3 Wallace, SW cor. SE SW, Section 15-32-4, in the Winfield Pool, has been shot with 60 quarts in sand at 2,298-2,320 feet and produced 50 bbls. Foster, Deal and others' No. 1 Townsite, NW cor. NE SE NW, Section 22-32-4, is a 45-bbl. well producing from sand at 2,286-2,368 feet after being shot with 120 quarts. Marland Oil Co.'s No. 1 Buckles, NW cor. NE, Section 6-35-3, in the Arkansas City Field, has been abandoned at 3,580 feet.

**Elk County**

Seeley and others' No. 3 Donnall, C SE NW, Section 12-30-9, in the Howard district, is drilling at 1,000 feet. Love & Watson made location for No. 1 McSpadden, CEL NW SE, Section 18-31-10, Moline area.

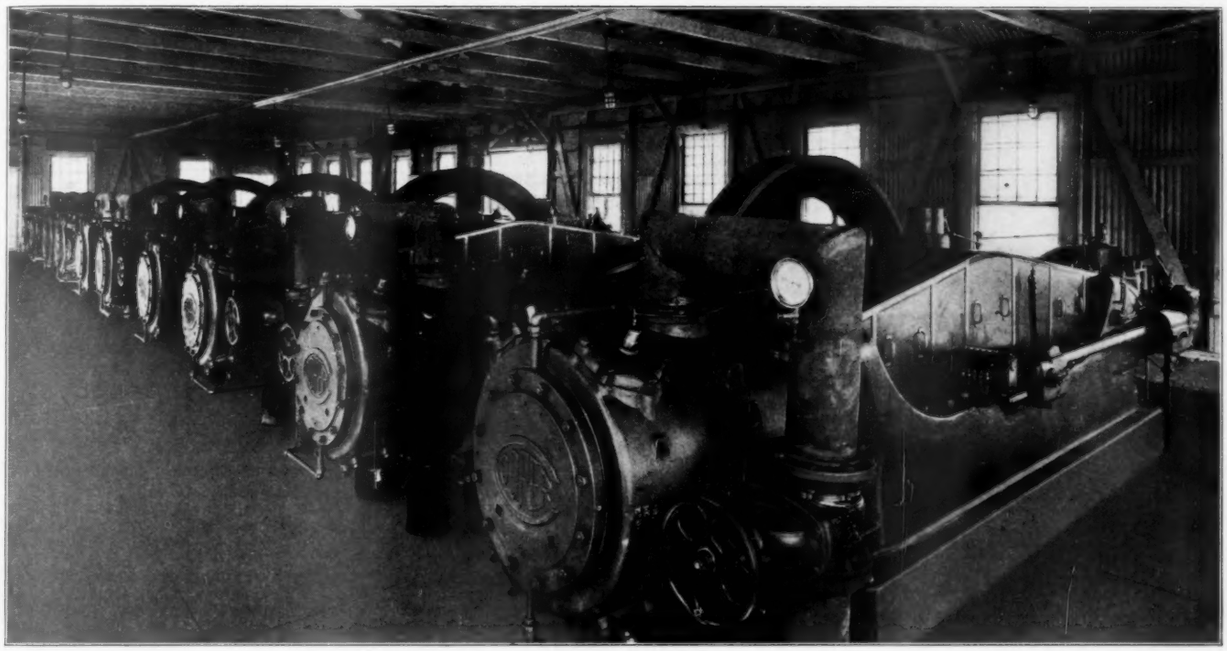
Empire Gas & Fuel Co.'s No. 5 Porter, CSL NW, Section 13-29-8, is making 25 bbls. from sand at 2,975-80 feet. Ohio Oil Co.'s No. 1 Crist, SE cor. SW, Section 11-31-9, is dry at 2,368 feet. Union Gas Corp.'s No. 8 Leffingwell, SE cor. NE SW, Section 14-31-10, had an intial production of 540 bbls. from sand at 1,621-46 feet. Landon and others' No. 1 Johns, SE cor. Section 28-31-10, is dry and abandoned at 2,312 feet.

**Greenwood County**

Snyder and others made location for No. 1 Laird, NE cor. SE SW, Section 3-23-10. Superior Oil Co. is rigging up a machine for No. 9 Jones, NE cor. SW SW, Section 21-23-13. Abel, Rhodes & Schul made location for No. 1 Freeman, SE cor. NW, Section 6-24-11. Cross and others have a machine at the location for No. 1 Hoover, NE cor. SE, Section 36-24-12. Mid-Kansas Oil & Gas Co. has a rig on the ground for No. 2 Hoffman, SE cor. SW SW, Section 24-25-8, Sallyards Field.

Syndicate Oil Co.'s No. 7 Bradfield, NE cor. SE, Section 2-22-10, in the Madison Field, is dry at 2,145 feet. Empire Gas & Fuel Co.'s No. 2 Inthrum, SW cor. Section 12-22-11, is a 10-bbl. well in sand at 1,863-1,906 feet. No. 4 Gravette, NW cor. SE NE, Section 14-22-11, has sandy shale at 1,930-34 feet and was abandoned at 1,953 feet. Fisher, Lauck and others' No. 1 Broddock, SW cor. NW, Section 24-22-11, is a dry hole at 2,175 feet. Roth, Farout and Manhattan Oil Co.'s No. 4 Tucker, NE cor. NW SE, Section 22-23-10, made a 20-bbl. well when it was shot with 20 quarts in sand at 2,252-61 feet. Pure Oil Co. has abandoned the location for No. 7 Oliver, SW cor. SE SE, Section 8-23-11. Darby Oil Co. and others' location for No. 3 McGilvray, NW cor. NE NE, Section 17-23-11, has been abandoned. Mid-Continent Petroleum Corp.'s No. 2 Ellis, SE cor. SW NW, Section 26-23-11, had sand at 1,897-1,915 feet and after a shot of 120 quarts was completed for 10 bbls. Transcontinental Oil Co.'s No. 1 Schwab location, NW cor. Section 2-23-12, has been abandoned. Simmons & Rhodes' No. 1 Wengler, NE cor. SW, Section 12-23-12, has been abandoned at 1,885 feet. Sinclair Oil & Gas Co.'s No. 1 Robertson, NW cor. SW SW, Section 17-24-11, was completed for a 50-bbl. well in sand at 1,805-22 feet. Mid-Kansas Oil Co.'s No. 5 Jackson, NE cor. NW NW, Section 25-25-8, was shot with 30 quarts in sand at 2,360-85 feet and made a 210-bbl. producer. Snyder and others' No. 1 Brown, SE cor. NE

# More Evidence Favoring COOPERS



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There can be but one explanation of why so many of the largest companies swing to Cooper engines—by comparison they find them to be generally more satisfactory and they prefer to do business with an old organization which has built a reputation for assuming full responsibility for its product.

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# The G-R Bentube Section

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Its unit type construction permits quick and easy adaptation to change in plant capacity. Its exclusive scale-shedding feature assures maintenance of guaranteed capacity no matter how bad the cooling water may be. All units are standard and interchangeable, and sections may be carried in stock for immediate application to any cooling service or promptly obtained in any quantity from our warehouses. The simple, sturdy construction of heavy cast iron headers and Admiralty tubes is extremely durable and can be depended upon for long, trouble-free service.

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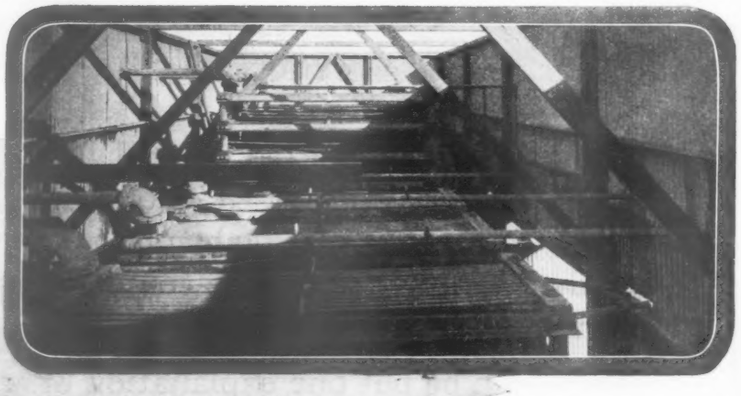

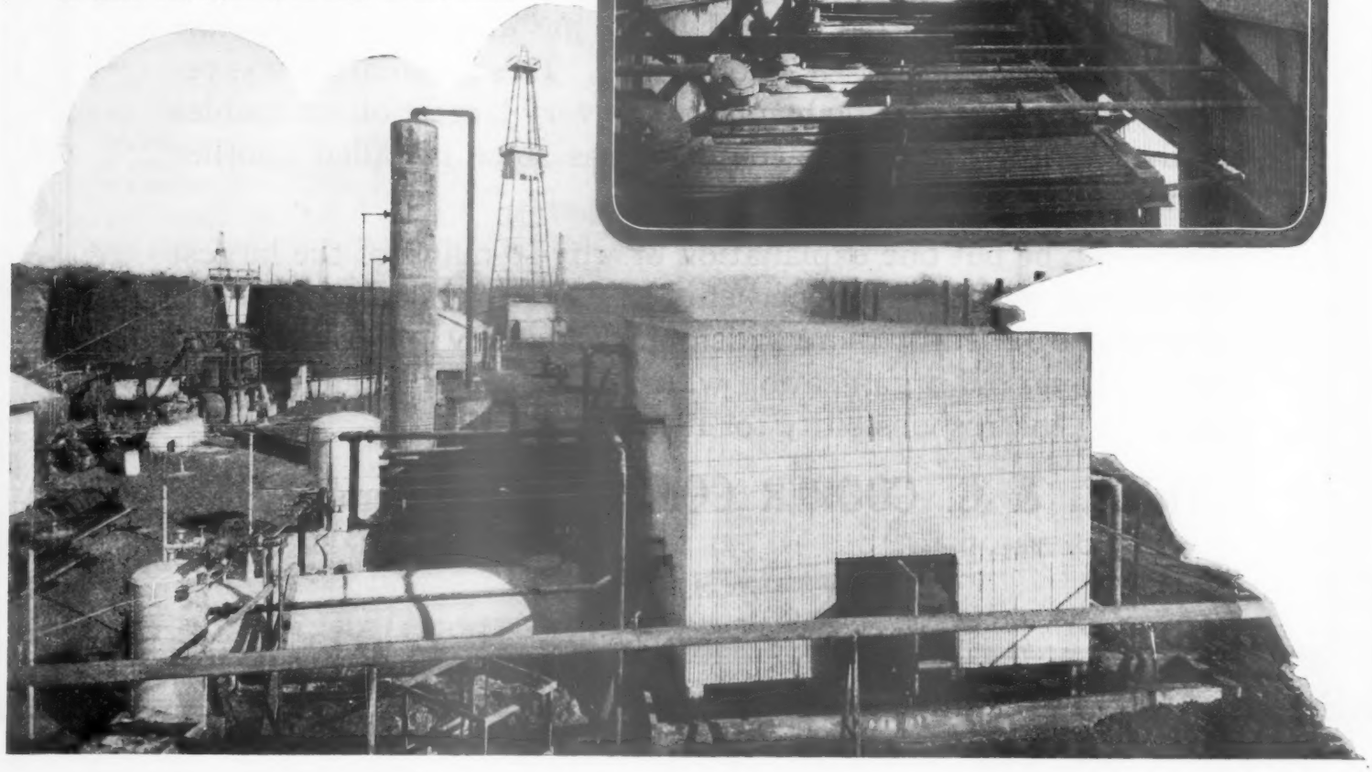

NE. Section 15-25-12, a location, has been abandoned.

**McPherson County**

Johnson and others' No. 1 Kuns, SE cor. NW, Section 12-19-3w, is spudding.

**Reno County**

T. B. Slick's No. 1 Dutton, SE cor. NW SW, Section 25-26-9, is a dry hole at 4,453 feet.

**Rice County**

Pryor & Lockhart's No. 1 Deed, NE cor. SW NW, Section 1-19-7, is dry at 4,456 feet. Midland Oil Co.'s No. 1 Johnson, SE cor. SW SW, Section 26-20-6, is making 20 bbls. from sand at 3,372-3,430 feet. Independent Oil & Gas Co.'s No. 3 Walstein, CSL SE NW NW, Section 2-21-6, came in for 427 bbls. from sand at 3,442-53 feet.

**Russell County**

Streeter & Stearns made location for No. 1 Graham, SW cor. NE, Section 7-13-15.

**Sumner County**

Derby Oil Co. has the rig up for No. 2 Reitz, NW cor. NE NW SW, Section 25-31-2, in the Churchill Pool. Roxana Petroleum Corp. made location for No. 1 Sleigh, CEL SE SW SW, Section 25-31-2. Location for No. 7 Riverbed, SE cor. NW NW, Section 25-31-2 was made also. Location was also made for No. 7 Churchill, C S half SE SW, Section 25-31-2. The location for No. 1 Taton, CNL S half N half, Section 36 31-2, has been staked.

Roxana Petroleum Corp.'s No. 2 Mason, NE cor. SE NW, Section 25-31-2, in the Churchill Pool, has been shot with 100 quarts and produced 428 bbls. from sand at 1,883-1,915 feet. No. 3 Mason, SE cor. NE NW, Section 25-31-2, made 500 bbls. after a shot of 100 quarts in sand at 1,848-1,915 feet. No. 2 Rutter, NW cor. SW NE, of the same section, found the Churchill sand at 1,880-1,920 feet and after a shot of 100 quarts put 1,000 bbls. in the tanks. Selby Oil & Gas Co.'s No. 1 Island, NW cor. SW NE, Section 36-31-2, is good for 210 bbls. from the Churchill sand at 1,851-1,914 feet. Marland Oil Co.'s No. 1 Swain, NW cor. NE NE, Section 25-33-2, is producing 225 bbls. from sand at 3,569-70 feet.

**Woodson County**

Superior Oil Co. has a machine at the location for No. 15 Dewey, SW cor. NE SW, Section 31-23-14.

Little Seven oil Co.'s No. 5 Collins, C E half NE, Section 30-23-14, was shot with 60 quarts in sand at 1,674-84 feet and produced 15 bbls. Alters and others abandoned the location for No. 1 Hunt, NW cor. SW, Section 13-25-14.

## OKLAHOMA FIELDS

(Continued from Page 52)

tion for No. 1-A NE cor. NW, Section 28-22-12.

Phillips Petroleum Co.'s No. 8 NE cor. SE SW, Section 7-27-6, had the Burbank sand 2,954-90 feet drilled to 3,005 feet and after a shot of 90 quarts was completed for 70 bbls. Carter Oil Co.'s No. 3 NE cor. NW, Section 33-27-6, was completed for 60 bbls. in the Burbank sand 2,870-2,925 feet after two shots. Delmar Oil Co.'s No. 2 SW cor. NE SE, Section 23-27-11, is a 15-bbl. well in sand 1,034-80 feet. Knupp Oil Co.'s No. 1 NW cor. SE SE, Section 30-27-12, had the top of the lime at 1,746 feet and the first break at 1,778 feet. Water was encountered and the well abandoned. Galt-Brown Oil Co.'s No. 1 NE cor. SW, Section 8-26-7, had a show of gas in the chat at 2,910 and was abandoned at 2,914 feet. Indian Territory Illuminating Oil Co.'s No. 350 NE cor. SW SW, Section 27-25-8, is making 6,000,000 feet of gas from sand 1,008-13 feet. No. 362 NE cor. SE NW SW, Section 27-25-8, is producing 2,000,000 feet of gas from sand 628-38 feet.

The Texas Company's No. 4 SW cor. NW SW, Section 29-25-8, was shot with 40 quarts in the Bartlesville sand 2,293-2,301 feet and made 40 bbls. the first 24 hours. M. & T. Oil Co.'s No. 3 NW cor. SE SW, Section 34-23-9, is a 5-bbl. well in the Layton sand 1,013-29 feet. Mid-Continent Petroleum Corp.'s No. 2 SW cor., Section 16-23-10, is dry in the Wilcox sand at 2,500 feet. W. S. Mitchell's No. 10 SE cor. NW SE NW, Section 7-21-9, is producing 75 bbls. from a sand 574-96 feet after being shot with 80 quarts.

**Okfuskee County**

Carter Oil Co. and others have the rig up for No. 3 Unallotted, SE cor. NW, Section 23-11-11. Kingwood Oil Co.'s No. 1 Barnett, NE cor NW, Section 4-10-11- is dry and abandoned at 2,920 feet. Morgan, Flynn, & Roxana Petroleum Corp.'s No. 2 Lockhart, NW cor. NE NW, Section 19-10-11, has been abandoned at 3,725 feet. Atlantic Oil Producing Co.'s No. 2 Fite, NE cor. NW, Section 7-10-12, was completed for 11,000,000 feet of gas. Sand record 2,625-30 feet.

**Okmulgee County**

Moffett and others have the rig on the ground for No. 5 Holmes, NE cor. NW NE, Section 7-11-12. Sheridan Oil Co. has built the rig for No. 1 Wills, SW cor. SE NW, Section 33-15-12. Jordan & Thompson built the rig for No. 1 Thornburg, C NW NE, Section 2-15-12. L. C. Wheeler and others have built the rig for No. 1-A Cobb, NW cor. NE SE, Section 13-15-11. Savoy Oil Co. has the rig up for No. 3 Grayson, CSL SE SE, Section 19-16-14.

T. A. Johnson's No. 1 Marsey, NW cor., Section 15-15-12, is a 50-bbl. well in the Wilcox sand 2,636-49 feet. W. B. Pine and others' No. 3 Bighead, SW cor. NE SE, Section 9-15-12, was shot with 25 quarts in the Wilcox sand 2,640-56 feet and made a 15-bbl. well. X. K. Stout's No. 4 Mayfield, C SW SW, Section 20-16-14, is producing 350 bbls. from the Glenn sand 1,642-54 feet. Lakeside Oil Co.'s No. 1 Porter, NE cor., Section 34-13-11, was completed for 25 bbls. in the Youngstown sand 2,476-90 feet. M. S. Mussellem's No. 2 Rentie, NE cor. NW SE, Section 19-14-15, is rigging up. The Texas Company's No. 14 Bruner, CSL SW SE, Section 16-15-14, was brought in for 6,000,000 feet of gas from sand 1,720-30 feet. J. L. Selby's No. 7 Flint, C NW SE, Section 26-14-14, shot 40 quarts in sand 1,014-24 feet and made 6 bbls. Elm Oil Co.'s No. 3 Doyle, CSL NE SW, Section 28-13-14, was completed for 12 bbls. after a shot of 100 quarts in sand 1,906-1,914 feet.

**Pottawatomie County**

Gypsy Oil Co. made location for No. 5 Earl, SE cor. NE NW, Section 16-9-5, in the Earlsboro Pool. Magnolia Petroleum Co.'s No. 1 Billington, NE cor. NW NE, Section 22-7-4, is a location. Pierce Oil Co.'s No. 1 Talley, SW cor. NW, Section 19-7-4, was shot twice and is pumping 105 bbls. from sand 3,860-65 feet.

**Seminole County**

In the Earlsboro Pool, Amerada Petroleum Corp' is rigging up rotary tools on No. 1-A Anderson, NW cor., Section 15-9-5. Gypsy Oil Co. made location for No. 3 B. Carter, NW cor. SE NW, Section 11-9-5. Kingwood Oil Co. & Roxana Petroleum Corp.'s No. 4 Harjo, NE cor. SE SE, Section 22-9-6, in the Seminole Pool, is drilling deeper at 4,119 feet. Gypsy Oil Co.'s No. 3 J. Carter, NW cor., Section 24-9-6 is being deepened from 4,100 feet and now fishing at 4,188 feet. Carter Oil Co.'s No. 1 Jackson, SE cor. SW NE, Section 27-9-6, is rigging up to deepen. No. 3 Strothers, SE cor. NE SE, Section 34-9-6, is a rig. Mid-Kansas Oil & Gas Co. made location for No. 1 Babb, NW cor. SE SE, Section 18-9-8, north of Wewoka. Pure Oil Co.'s No. 15 Reed, NW cor. NE SW, Section 14-8-6 in the Bowlegs Pool is a rig building. The rig is also being built for No. 16 Reed, SW cor. SE NW, Section 14-8-6. Indian Territory Illuminating Oil Co.'s No. 10 Livingston, SE cor. NE NW, Section 15-8-6 is a location. Location for No. 7 Walker, SE cor. NE SE, Section 15-8-6 has been made, also the location for No. 3 Walker, NE cor. SE SE, Section 15-8-6. Rig is being built for No. 9 Goforth, NE cor. SE NE, Section 15-8-6. Location for No. 10 Goforth, SW cor. NW NE, Section 15-8-6, was made, also for No. 11 Goforth, SE cor. NW NE, Section 15-8-6. Atlantic


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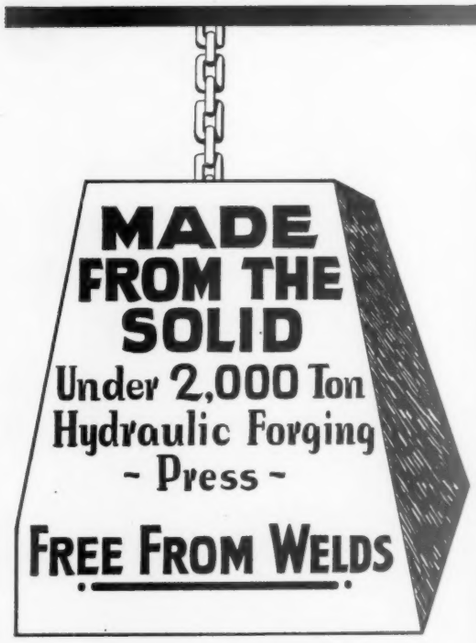

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# JAQUES *Forged Steel* DRILLING CONNECTION


Oil Producing Co.'s No. 2 Fleet, NW cor. NE NW, Section 23-8-6, is drilling at 884 feet.

Amerada Petroleum Corp.'s No. 1 Anderson, NW cor., Section 15-9-5, in the Earlsboro Pool has been abandoned at 4,278 feet on account of a bad fishing job.

McGraw & Boughman's No. 2 Anderson, NE cor. NW SW, Section 15-9-5, is a dry hole in the Wilcox sand 4,331-32 feet. Carter Oil Co.'s No. 2 Frazer, SW cor. NW NW, Section 3-9-6, Searight area, had the Wilcox sand 4,348-65 feet with an initial production of 2,685 bbls. about 700 bbls. of which came from the Hunton lime. No. 3 Davis, SE cor. NE NE, Section 4-9-6, made 2,715 bbls. the first 24 hours from the Wilcox sand 4,346-57 feet. No. 3 G. F. Killings, NW cor. SW SE, Section 14-9-6, in the Seminole Pool swabbed 800 bbls. the first 24 hours from the Wilcox sand 4,111-21 feet. Mid-Continent Petroleum Corp.'s No. 12 Rentie, NE cor. SE, Section 14-9-6, is swabbing 45 bbls. after two shots in the Hunton lime 4,283-4,313 feet. No. 6 Tayeche, NW cor. SE SW, Section 24-9-6, is swabbing 50 bbls. from the Hunton lime 4,120-49 feet. Carter Oil Co.'s No. 2 M. Killing, NE cor. SE NW, Section 23-9-6, swabbed 400 bbls. natural from the Wilcox 4,040-68 feet. Indian Territory Illuminating Oil Co.'s No. 7 Bowlegs, SE cor. NE SE, Section 26-9-6, had the Wilcox sand from 4,078-96 feet, shot 40 quarts and is swabbing 900 bbls. T. B. Slick's No. 1 R. Cudjo, NW cor. SE SW, Section 35-9-6, was shot four times with 15 quarts and made 3,060 bbls. the first 24 hours from the Wilcox 4,116-74 feet. No. 4 Franks, SW cor NE, Section 35-9-6, was given a shot of 5 quarts in the Wilcox sand 4,070-4,110 feet and made 2,500 bbls. the first 24-hour gauge. Gypsy Oil Co.'s No. 1 Frazee, SW cor. NE SW, Section 36-9-6, has been abandoned at 4,466 feet. Empire Gas & Fuel Co.'s No. 1 Lacey, SE cor NW SW, Section 14-8-6, in the Bowlegs Pool, produced 5,657 bbls. the first 24 hours from the Wilcox sand 4,055-57 feet. Carter Oil Co.'s No. 1 Walker, NE cor. SW SE, Section 15-8-6, produced 7,005 bbls. the first 24 hours from the Wilcox sand 4,049-55 feet. Indian Territory Illuminating Oil Co.'s No. 1 Burden location, NW cor. SW SW, Section 23-8-6, has been abandoned. Independent Oil & Gas Co. & Atlantic Producing Co.'s No. 4 Long, NW cor. SW NE, Section 32-8-8, in the Wewoka Pool, came in for 65 bbls. after a shot in the Wewoka sand 3,930-40 feet. Carter Oil Co.'s No. 1 Street, SE cor. NE NW, Section 30-7-3, is dry in the Wilcox sand at 4,476 feet. The Producers & Refiners Corp.'s No. 13 Amos "B," SE cor SW SE, Section 31-8-8 had an initial production of 80 bbls. The Prairie Oil & Gas Co.'s No. 7 Kinkade, SE cor. SW SE, Section 33-10-6, in the Searight Pool, made 3,160 bbls. the first 24 hours. No. 2 Washburn, SE cor SW NW, Section 34-10-6, has been abandoned.

**Stephens County**

Beard & Cobb have the rig up for No. 1 Dierkes, SE cor. SW NE NW, Section 13-2s-8w. Magnolia Petroleum Co.'s No. 6 Hollingsworth, NW cor. NE SW SW, Section 14-2s-5w, is drilling at 1,650 feet. Gilmer and others have built the rig for No. 2 Stewart, NW cor. SE SE, Section 24-1s-4w. Cruce Oil Co.'s No. 1 M. Frensley, SE cor. SW NE, Section 12-1-6w, is drilling at 980 feet, estimated making 10 bbls. from sand 965-73 feet.

**Payne County**

Twin State Oil Co.'s No. 2 Garr, NE cor Section 22-19-5, drilled to total depth of 3,110 feet and plugged back to sand 2,822-34 feet where 10 quarts were shot and the well made 5 bbls.

**Pawnee County**

Shelts and others built the rig for No. 4 Martin CWL SW NE, Section 7-20-8.

Twin State Oil Co.'s No. 1 Sallee, NW cor. SE, Section 32-20-6, is producing 65 bbls. from sand 3,384-3,400 feet. Magnolia Petroleum Co.'s No. 1 L. Vogler, SW cor. NE NE, Section 32-20-6, is making 45 bbls. from sand 3,373-79 feet.

**Pontotoc County**

Dixie Oil Co. is rigging up the rotary for No. 1 LaSalle, SE cor. NW, Section 10-4-6. American Oil & Refining Co. has built the rig for No. 1 Logsden, C NE SW, Section 35-5-6. Location has been made for No. 1 Phillips, CSW NE, Section 34-5-6. Bowles and others' rig is up for No. 1 Lewis, SE cor. SW, Section 29-5-5. La Salle and others have the rig up for No. 2 Copeland, SW cor. NE SW, Section 28-5-5.

**Tulsa County**

Superior Oil Corp.'s No. 7 McKee, CWL SW SW, Section 6-19-10, was completed for 80 bbls. after a shot of 90 quarts in sand 1,986-2,009 feet. W. Holmes and others' No. 1-A Couch, C WL SW NW, Section 11-17-13, is a dry hole in the Wilcox sand 1,954-56 feet. Edwards and others' No. 1 McIntosh, SW cor. SE, Section 7-18-14, is dry and abandoned at 2,067 feet in the Wilcox sand.

**Wagoner County**

F. E. Webb and others' No. 3 Tiger, CNL NE NW, Section 4-18-16, is spudding. Knox & Schouse moved a machine to the location for No. 1 Atkins, NE cor. NW, Section 13-17-16. M. S. Musselem's No. 3 Soloman, SE cor., Section 29-16-16, is drilling at 850 feet. A. A. Williams has the machine out for No. 2 Hawkins, NE cor., Section 32-16-18.

Ted Ray Oil Co.'s No. 3 McIntosh, NW cor. SE SE, Section 4-17-16, came in for 196 bbls. from sand 699-706 feet. Mitchell Oil Co.'s No. 4 Smith, CNL SW NE, Section 2-16-16, is a dry hole at 1,506 feet. H. H. Flescher's No. 4 Lewis, SW cor. SE, Section 27-16-17, is making 4,000,000 feet of gas from sand 1,735-87 feet.

## PENNSYLVANIA MARKET CONTINUES VERY SOFT

OIL CITY, Pa., Mar. 19.—Gasoline is very soft at present in the Pennsylvania refined market and stocks of motor fuel held by refiners are so large there does not seem to be any possibility of improvement in the near future. There has been a slight improvement in demand at the refineries caused doubtless by the large consumption which has resulted from good weather for March throughout the past week and an unusually heavy automobile use. Stocks, however, are very large and it will take a prolonged period of great consumption to make conditions better, many in the industry believe.

Fuel oil is holding up well. Demand is about the same as it has been. The price structure of kerosene is lower but the demand improved during the week. In some places plowing has actually started and it will soon be under way everywhere with big consumption. There is lots of kerosene in storage but some of the best versed oil men in this section believe it has touched bottom for the present movement. Cylinder stocks continue weak. Neutrals are scarce and strong and in excellent demand. Lubricants and motor oils are in good demand and bright stocks are in good condition. Wax continues very weak.

## NEW COMPANY SUCCEEDS BLACK STEEL & WIRE

Announcement has been made of the formation of the Union Wire Rope Co. of Kansas City, Mo., successor to Black Steel & Wire Co., with R. H. Bartlett, president; H. R. Gruber, vice president, and William L. Maxwell, secretary-treasurer. The directors, in addition to these officers, are E. W. Sinclair, president Sinclair Consolidated Oil Corp.; A. T. Hopkins, engineer, P. W. Brooks & Co., New York; Frank L. Moore, oil operator, Tulsa, and H. N. Greis, oil operator, Tulsa. The company will continue to have branches in Tulsa, Okla.; Los Angeles, Calif.; Portland, Ore., and Seattle, Wash.

## MADE VICE PRESIDENT

Announcement has been made by the Standard Oil Co. of New Jersey of the election of Frank A. Reed to a vice presidency in the organization.

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## Joseph Reid Gas Engine Company

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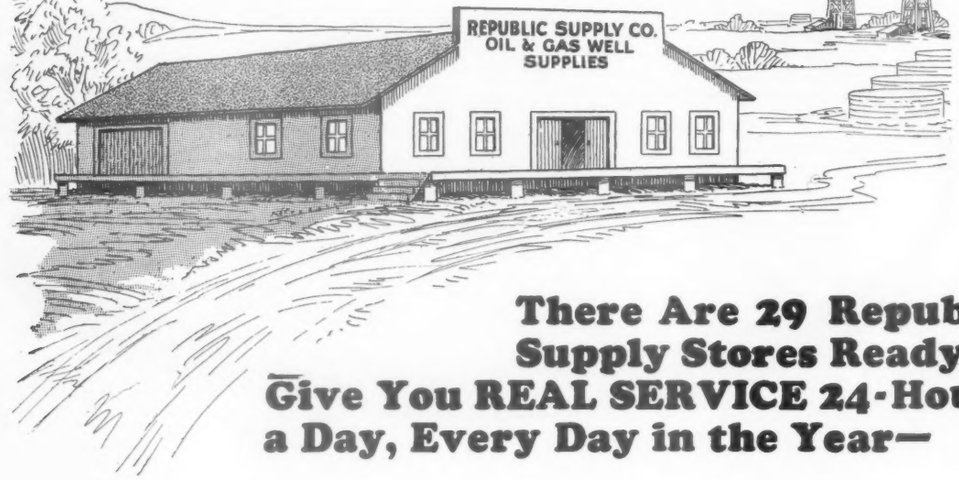


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## Republic Supply Company

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## POTASH MAY MAKE DRY HOLE PROFITABLE

(Continued from Page 42)

potash minerals; (2) secondary potash minerals.

Primary potash minerals are those formed by cooling of igneous (molten rock) masses from a state of fusion. Among the most common representative primary potash minerals may be named—feldspar, leucite and mica, all complex silicates of potassium and aluminum. These minerals are widely distributed in acid igneous rocks such as granites, syenites and diorites.

Secondary potash minerals are those derived by chemical action from the primary potash minerals. Some of the more common secondary potash minerals are sylvite (potassium chloride [KCL]), carnallite (potassium magnesium chloride [$KMgC^{13}{}^{6}H^{20}$]), kainite (potassium magnesium chloride and sulphate [$MgSO^{4}$, $KC^{1}$, $^{3}H^{20}$], and polyhalite (potassium, calcium magnesium sulphate [$^{2}CaSO^{4}$, $MgSO^{4}$, $K^{2}SO^{4}$, $^{2}H^{20}$].)

The secondary potash minerals are found in commercial quantities almost always in association with beds of rock salt resulting from drying up of inland sea or lake deposits.

### Solubility Important

Primary potash minerals which constitute a considerable percentage of granites and other igneous rocks, subjected to weathering, erosion and acid action of surface waters are very slowly broken down and taken into solution by circulating waters. These waters flowing to inland lakes or the ocean carry in minute quantities potash in soluble form. All sea waters and practically all lake waters show by chemical tests more or less potash. Primary potash minerals are relatively highly insoluble and chemically inactive or stable.

Secondary potash minerals are relatively highly soluble and chemically active, reacting readily with other chemical compounds with which they may be associated in solution.

Bearing in mind that to be available as plant food potash must be in highly soluble form it is evident that the potash in primary potash minerals, being relatively insoluble, is not available in its natural form as a fertilizer. Primary potash minerals, if used as a fertilizer, must be submitted to chemical treatments using strong acids or high heat to break up the complex potash minerals so they may be rendered soluble.

On the other hand, secondary potash minerals are generally so highly soluble as to have a tendency to remain in solution as in sea or lake waters when other less soluble chemical compounds are precipitated in solid form.

Secondary potash minerals in solid form in commercial quantities have been almost invariably found resulting from the complete drying up of ancient lakes or inland seas. Sodium chloride ([$NaC^{1}$] common salt) is generally found under like conditions. It is also highly soluble. It is, therefore, reasonable to expect in natural deposits of secondary potash minerals a close association with rock salt and with other highly soluble natural salts.

### More Soluble Form

The secondary potash minerals are more soluble than the corresponding sodium minerals; potassium chloride (sylvite) is more soluble than sodium chloride (common salt.) Accordingly, even in inland sea or lake deposits evaporation may go forward to a point where common salt is precipitated out of the solution and yet the corresponding potassium salts being more soluble may not be precipitated but remain in concentrated form in the lake or sea water. It is almost impossible to get the more soluble secondary potash salts (sylvite, carnallite, kainite) precipitated in solid form without complete drying up of lake or inland sea basins in which such salts formerly occurred in solution.

To preserve a highly soluble potash deposit after complete evaporation and before more water reaches the deposit, a protecting cover, which will prevent water circulation, must be formed. The potash salts are so soluble that should water come in contact with the natural solid deposit, the potash minerals would go almost instantaneously back into solution.

Highly soluble secondary potash minerals have been found in great quantity in Germany in the Stassfust deposits, in France, Spain and at other places. These deposits usually have a thin protective covering of shale or clay impervious to the passage of water. This covering has served to protect the potash minerals from water contact by which they would be immediately redissolved.

Such unusual conditions, necessary to precipitation of highly soluble secondary potash minerals and to the preservation of these minerals after precipitation, are not to be expected commonly. It is not surprising that more deposits of water soluble potash in solid form have not been found.

### American Deposits

The location of vast amounts of primary potash minerals in the United States is already known. The green sands of New Jersey and the leucite of Leucite Hills region of Wyoming are sources of primary potash minerals almost unlimited. Much time and money has been expended in the United States in search for primary potash minerals and in chemical treatment of these minerals to reduce them to soluble form. Many chemical and heat processes have been patented for the extraction of potash from primary potash minerals, but thus far the expense of these processes far exceeds the value of the potash produced.

Practically all of the world's supply of commercial potash is obtained from secondary potash minerals. Methods for the extraction of potash from the highly soluble secondary potash minerals are relatively simple and inexpensive, making the extraction cost much less than the value of the potash.

The most promising outlook for the development of an American potash industry at present appears to be the discovery and commercial extraction of potash from soluble potash minerals in that part of the Southwest Permian Basin, comprising a part of southeast New Mexico and southwest Texas. Recent discoveries of potash have been made near the western edge of this basin in Eddy County, New Mexico.

### Southwest Permian Basin

The Southwest Permian Basin includes parts of southern Kansas, western Oklahoma, southeastern New Mexico and western Texas. The "so-called" permian rock salt beds lie within this basin. Potash has been noted in well cuttings in considerable quantities (1 per cent to 10 per cent) only in the southern part of this basin, and for this reason we are more interested in that part of the basin lying in west Texas and southeastern New Mexico.

The accompanying map shows the southern part of the Southwest Permian Basin and was compiled from information taken from map of H. W. Hoots, Bulletin 780, United States Geological Survey, and from personal observations of the writer during the past three years working in that region.

This map shows the location of the Plains Syncline, the major structural feature between the Bend Arch of Central Texas and the anticlinal mountains (Sacramento and Guadalupe) of Southeastern New Mexico. The map also shows contours drawn on the salt beds of the region, the contour numerals indicating the approximate thickness in feet of the rock salt at the places drawn. These contours are based on information obtained from logs of wells drilled for oil in that arch. The map shows the salt beds thicker near the western and southwestern edges of the basin with a very rapid pinching out to the west, while the thickness varies much more gradually to the eastward, as shown by the spacing of the contours.

While this map shows the general fea-


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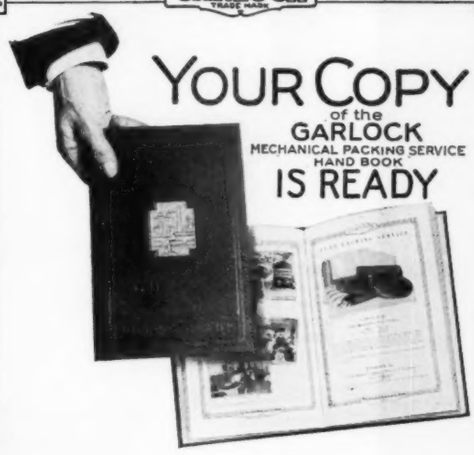


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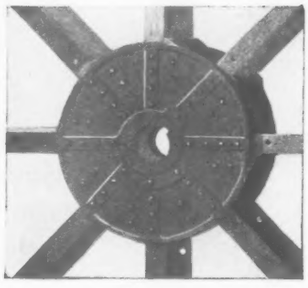

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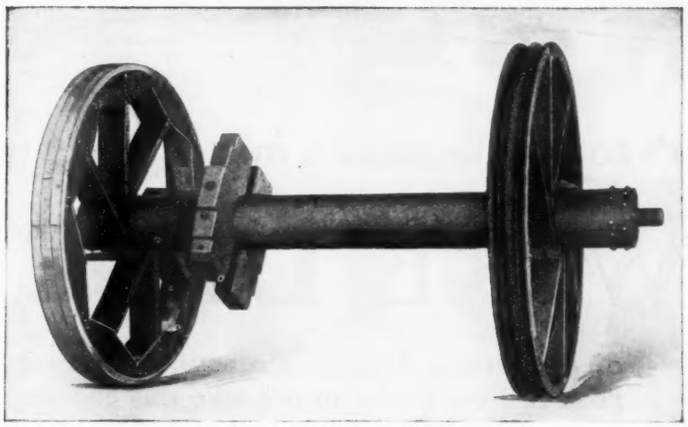

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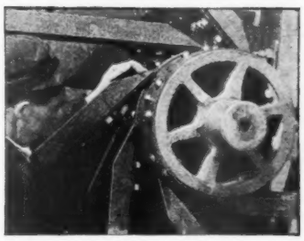

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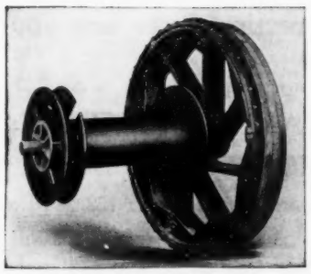

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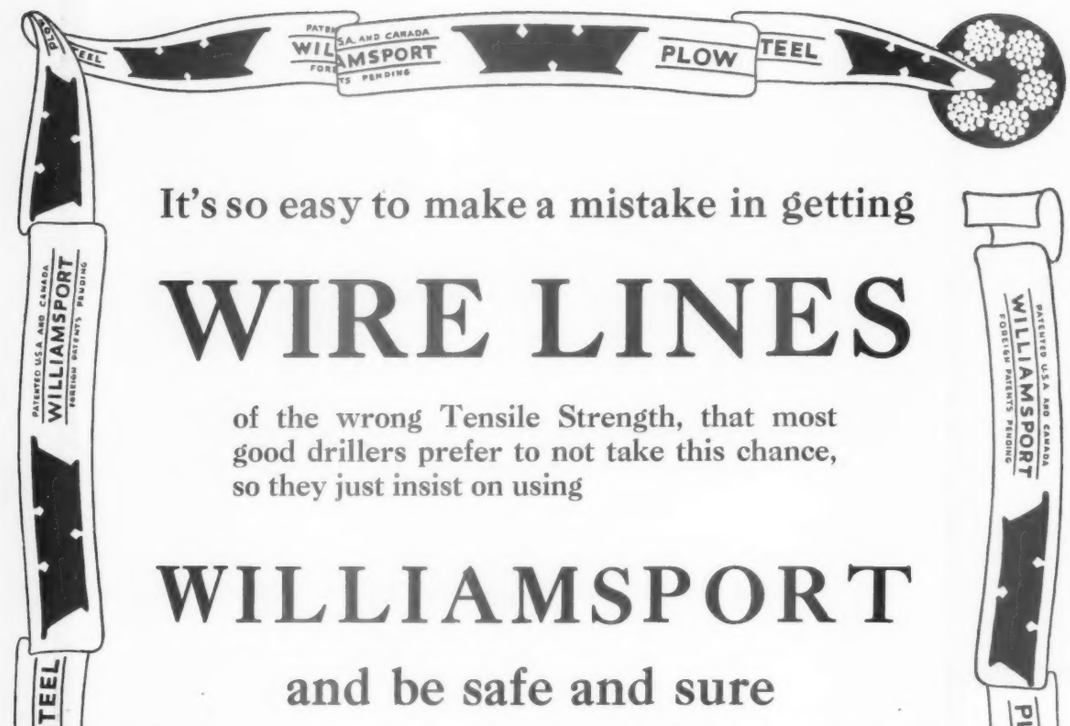


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tures of the occurrence of the salt beds, it must not be taken to indicate a smooth and even condition of sedimentation and a regular gradation of salt thicknesses. On the contrary, many data have already been observed which tend to strongly suggest that whereas the Southwest Permian Basin is a deep depositional basin there are within this large basin many small more or less disconnected local basins within which great variations in the thickness of salt sediments have been observed. Enough information is not at hand to outline the size of any of these local basins. As an example of wide variation in salt thickness within short distances within the heart of the basin may be cited, a salt thickness of 2,390 feet on Pinal Dome, northeastern Loving County, Texas (see map) and a thickness of only 450 feet of salt in well of Westbrook and others in Winkler County, Texas, 20 miles southeast of the Pinal Dome well.

The writer believes that it is in these local basins that the most favorable conditions exist for developing commercial potash.

### Twin Hills Potash Discovery

Early in 1925 the Snowden & McSweeney Co., oil producers of New York, undertook the drilling of a test well for oil near the center of Section 4, Township 21n, Range 30e, New Mexico Principal Meridian, in the extreme eastern part of Eddy County, New Mexico. This well was located on a government prospecting permit known as the McNutt permit, comprising 2,560 acres. It was drilled with cable tools to a total depth of 4,416 feet, with practically no showing of oil or gas. A set of samples from this test was carefully kept, cuttings being sampled at intervals of 5 to 10 feet.

This well penetrated such a thick salt series and contained so much pink material answering the description of the mineral polyhalite, a complex sulphate of potassium, calcium and magnesium, with water of crystallization, that numerous samples were analyzed chemically. Some of these samples were first sent to Dr. W. D. Turner, head of the Department of Chemistry, Missouri School of Mines, and some later sent to the United States Geological Survey. Analyses from both sources showed such a high percentage of potash (3 to 10 per cent) that Mr. Snowden decided to make a core test for potash. Besides a fairly high potash content, both United States Geological Survey and Doctor Turner reported in samples from different depths small amounts of the moneral sylvite, potassium chloride (KCL.) The occurrence of sylvite never before having been noted in any test for potash in the Southwest Permian salt basin, and its presence indicating the possibility of an area of complete drying up of the Permian Sea, was the principal reason for drilling a core test for potash near the test well drilled for oil.

The Snowden & McSweeney company, owned and controlled by Henry McSweeney and James H. Snowden and Mrs. Pearl Snowden, and managed by J. P. Shannon, is entitled to the major credit for this operation. Credit is also due to Capt. S. Ruellan for efficient field operation and advice and to the Mineral Exploration Co., core drill contractors, for work in taking the cores.

### Location of Twin Hills Area

The Twin Hills area is situated in the extreme eastern part of Eddy County, New Mexico, about 20 miles northeast of Carlsbad, the county seat. Twin Hills area is crossed by a good hard-surfaced state road connecting Carlsbad with Lovington, the county seat of Lea County, the extreme southeastern county of New Mexico, and is bounded both on the east and south by the State of Texas.

The location of the core test recently drilled for potash is 750 feet south and 250 feet west of the center of Section 4, Township 21s, Range 30e, near the eastern line of Eddy County, New Mexico.

### General Geology

The oldest rocks exposed in the Twin Hills region are shales and sandstones of Triassic Age. These formations are characterized by a blood-red color in contrast to the less intense coloring of formations directly overlying and underlying. Overlying the Triassic rocks in angular unconformity is a covering of Caliche of probable late Tertiary Age.

Recent deposits of dune sands, known as the Mescalero sands, cover a large area of this part of Eddy County, New Mexico, and extend eastward to the Staked Plains. The western edge of the Staked Plains constitutes a prominent topographic feature in the nature of a northwest-southeast escarpment rising about 150 feet above the sand hill country to the west.

An outline of the log of the core test drilled by Snowden & McSweeney company follows:

Red sandy shale, sandstone and gypsum, 0-606 feet.

Little water at 580 feet.

Salt interbedded with red shale and sandstone, 606-791 feet.

First pink polyhalite, 791-792 fee.

First thick polyhalite bed, 987-992 feet.

First sylvite, 1,212 feet.

Salt sylvite and shale, 1,212-1,466 feet.

Last sylvite, 1,466 feet.

Salt, shale and anhydrite, 1,466-2,093 feet.

The bottom of the core test was at 2,093 feet and still in the salt series. A well drilled for oil about 500 feet north of the core test entered the Delaware Mountain division of the Permian at a depth of about 3,800 feet and was in this same division when completed at a depth of 4,416 feet.

### Sedimentation

Water soluble potash in solid form may be expected in direct association with rock salt deposits found from drying up of inland seas or lakes. A study of sedimentation, especially of the salt-bearing Permian series, is of interest.

It is noted from the foregoing skeleton log that the first salt was obtained at a depth of 606 feet. Cores from this well showed the salt to occur in very intimate association with the shales and sandstones. There were literally dozens of salt beds varying from a thickness of a few inches to 30 or 40 feet. In a churn-drilled well this might have been recorded as all salt or as all shale and sandstone.

Cores showed the beds of polyhalite, 12 or 15 in number, to be solid pink, practically pure polyhalite, containing from 12 to 16 per cent potash. Salt beds with scattered particles of polyhalite were also pentrated but it is thought these will have no commercial value on account of the expense of extraction.

The first sylvite occurred at a depth of 1,212 feet and is considered by the writer by far the most significant potash find yet made in the Southwest Permian Basin. The sylvite varies in color from a milk white to cherry red, some of it a deep blue. It occurs intimately mixed with the rock salt. Individual beds of the sylvite-rock salt mixture from 1½ feet to 5 feet in thickness show a potash content of 9 per cent to 17 per cent.

The sylvite zone, from 1,212 to 1,466 feet, or 252 feet of sediments in which the highly soluble chlorides occur, compares very favorably in thickness with the chloride zone in the German and French deposits, which varies from 150 to 250 feet thick. Another interesting mineral bed was 18 inches in thickness and had a potash content of 17.5 per cent.

The salt zone in this well (from the top of first salt bed to bottom of last) was approximately 1,500 feet thick, while the salt zone in wells drilled in the Artesia oil field about 20 miles northwest of the core test varies from 50 feet to 250 feet in thickness.

### Structure

This core test was drilled on a local anticline which the writer has called the Twin Hills anticline, the most pronounced anticlinal fold in Eddy County east of the Pecos River. It was mapped on shales and sandstones of Triassic Age and


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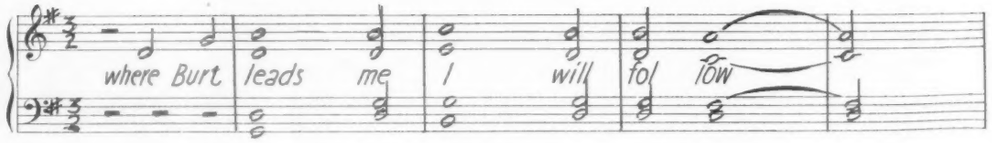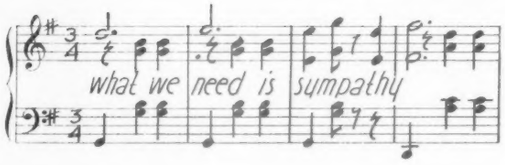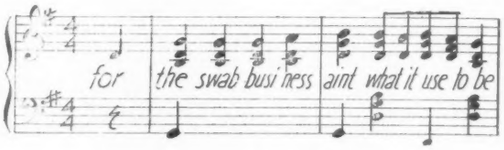

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its axis extends in a northwest-southeast direction.

**Coring Operations**

The core-drill test for this operation was drilled with a P2 Sullivan core drilling machine capable of drilling to a depth of 5,000 feet. The core taken was approximately 2½ inches in diameter. Most of the core was taken with a double core barrel and only short runs of 5 to 10 feet were made before pulling the cores. These short runs were particularly necessary while coring the salt to prevent solution of cores.

When coring salt with sylvite or other potash chlorides a 30 per cent mixture of magnesium chloride was used in the drilling water to prevent solution of the core.

Upon being taken from the core barrel the cores were arranged in wooden boxes 4 feet long, 2 feet wide and 4 inches deep with thin boards separating the cores. Cores were then sampled by sawing or splitting, depending upon the character of the material and several hundred chemical analyses for potash were made.

Cores were taken from a depth of 50 feet to 2,093 feet and the core recovery for the complete core was 65.6 per cent, which is thought to be the best recovery ever made in coring in this Permian basin.

**Significance of Test**

This is the first test in Southwest Permian Basin to show potash minerals other than polyhalite. This test showed sylvite and kainite, both very highly soluble potash minerals. It also showed langbienite, not highly soluble but comparing in composition to a high-grade German blended fertilizer known to the trade as "Sulphate of Potash Magnesia." Langbienite is found in German and French deposits only rarely.

Sylvite and kainite are the principal ore minerals of potash found in the German and French deposits, and belongs to a group of minerals which are very easily extracted and refined from the associated salt bodies.

This test is also the first to prove that pure polyhalite occurs in Southwest Permian Basin in practically solid layers and not disseminated in small particles throughout the salt masses. Both pink and white polyhalite beds were found which showed potash analyses of 10 to 16 per cent.

The United States Geological Survey, December 8, 1926, published results of chemical analyses on parts of this core submitted to it and stressed the discovery of polyhalite beds.

The importance of polyhalite beds as a source of commercial potash is questionable. German and French deposits show much polyhalite but it is not used by them as a source for extracting potash.

This core test has proved beyond a doubt that conditions in Southwest Permian Basin have been favorable for depositing in sediments the exact minerals (potash chlorides) from which 97 per cent of the world's supply of potash is obtained.

The extent, richness and thickness of these beds of mixed rock salt and highly soluble potash minerals is yet to be learned but the fact that these highly soluble (chloride) potash minerals do occur in that area is by far the most encouraging indication yet found. The possible economic significance of these recently discovered minerals cannot be disregarded.

**Building Up an Industry**

As a matter of fact, a potash industry if it is developed in the United States will necessitate the expenditure of millions of dollars in searching for potash and more millions in producing, preparing and marketing it in competition with the foreign produced product. The potash industry will be more like a manufacturing industry in which the best to be hoped for is a fair return on the money invested. There will be no "overnight" fortunes from producing potash. Potash must be mined and mining operations are slow and expensive.

In considering the economic aspects of developing an American potash industry attention is directed to four stages in the production of any natural mineral resource, namely: (1) Discovery of the raw material; (2) producing (mining); (3) refining; (4) marketing.

Regarding the economic production of potash from the Southwest Permian Basin it is just as important to prove that there is not too much potash as it is to prove that there is enough. Potash in this area occurs as a more or less well-bedded deposit in the rock salt. In west Texas and New Mexico alone the rock salt beds of the Permian are known to cover an area of 70,000 square miles. With such a tremendous area—if potash should occur over a considerable part of the salt area in minable thickness it would be economically almost worthless. The law of supply and demand would govern in potash production as in production of any other product. Capital would not risk taking a chance on such severe competition as the probable finding of too extensive deposits of potash would cause.

Of course, from the standpoint of a national asset it would be impossible to discover too much potash in this country, but as a basis for a sound industry from the producers' point of view too keen competition would undoubtedly ruin the industry.

**Mining Methods**

Economically, conditions of mining are of utmost importance in determining whether or not a potash deposit is commercial. The depth of the deposit, the character of formations to be penetrated, presence or absence of water and cost of labor are factors which have a direct bearing upon the cost of mining.

In comparing mining conditions in parts of the Southwest Permian Basin with those of France and Germany, it may be said that depths to which it will be necessary to carry mining in some parts of Southwest Permian Basin varies from 500 to 1,500 feet, while the French and German mines vary in depths from 1,600 to 5,000 feet.

It is likely that labor would cost more in Southwest Permian Basin than in the foreign countries but the use of better machinery in this country would probably make labor more efficient. The amount of explosive necessary to break down the ore and the cost of power bear upon the expense of mining.

**Refining Processes**

In a mining operation if the crude ore produced is not of sufficiently high grade to ship to market at a profit it must be concentrated or refined to produce a sufficiently high-grade product to market commercially.

In refining, the plant equipment, labor, heat, power and supplies, such as chemicals, has a direct bearing on the expense of the operation.

Another element in treating the potash to concentrate it which will be essentially a chemical treatment will be the element of time. For example, one potash mineral might require much more time to go into solution than another. For instance, polyhalite (potassium-calcium-magnesium sulphate) is difficultly soluble in cold water and requires some time for solution, while sylvite-potassium-chloride goes into solution almost immediately; the time element for this process being negligible.

Experiments conducted by Dr. W. D. Turner, head of chemical department of Missouri School Mines, for the American Potash Co., on solid polyhalite from New Mexico show that this polyhalite upon being finely crushed and water added to it has a very strong tendency to set, similar to plaster of paris, and this section may present grave difficulties in getting the potash in solution readily and cheaply.

It is highly probable that it may develop that polyhalite cannot be concentrated cheaply enough to a higher percentage potash product to justify concentration.

If this should prove to be the case, the use of polyhalite as a fertilizer would be confined to comparatively limited areas near enough to the mine so that expense

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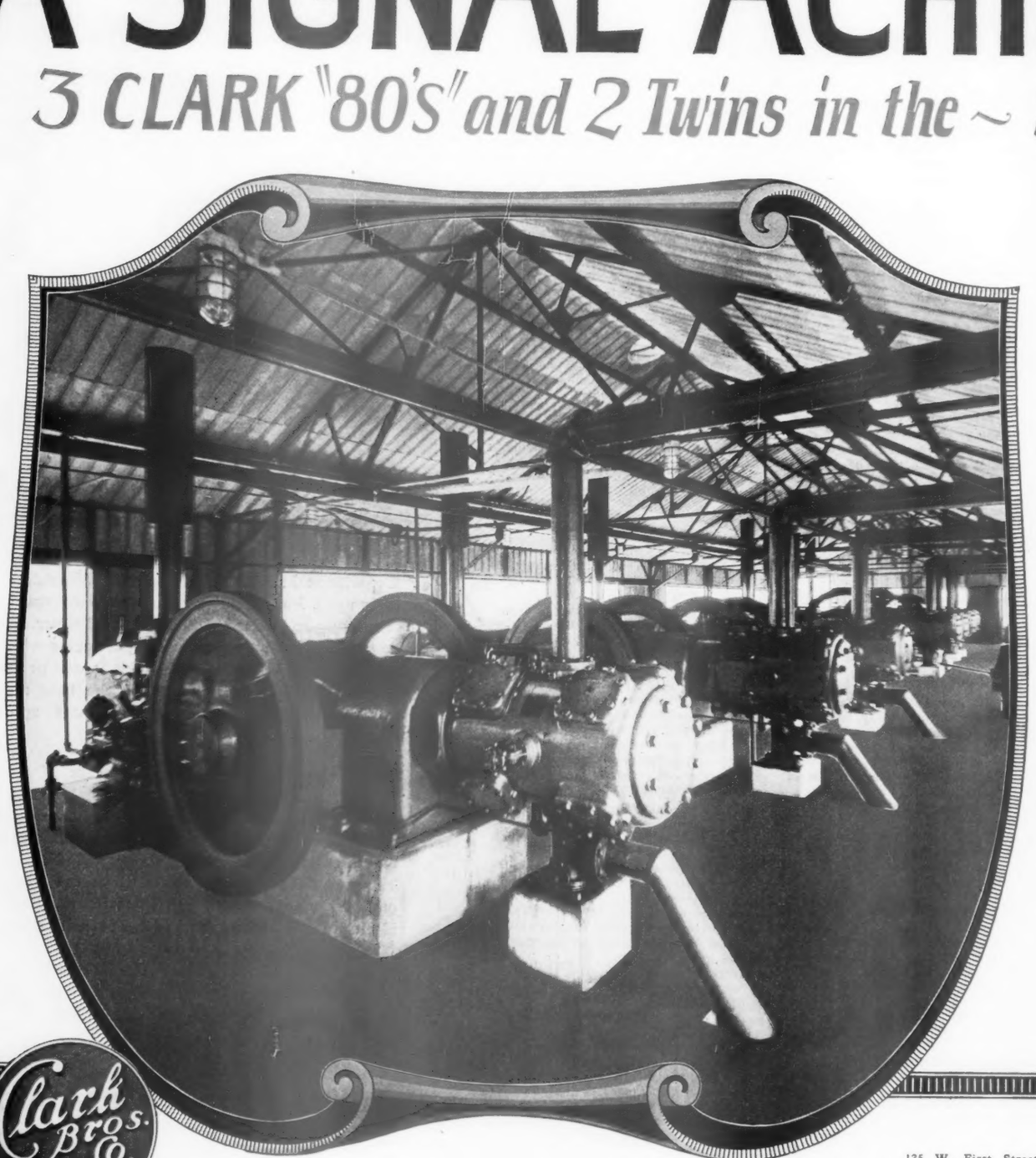

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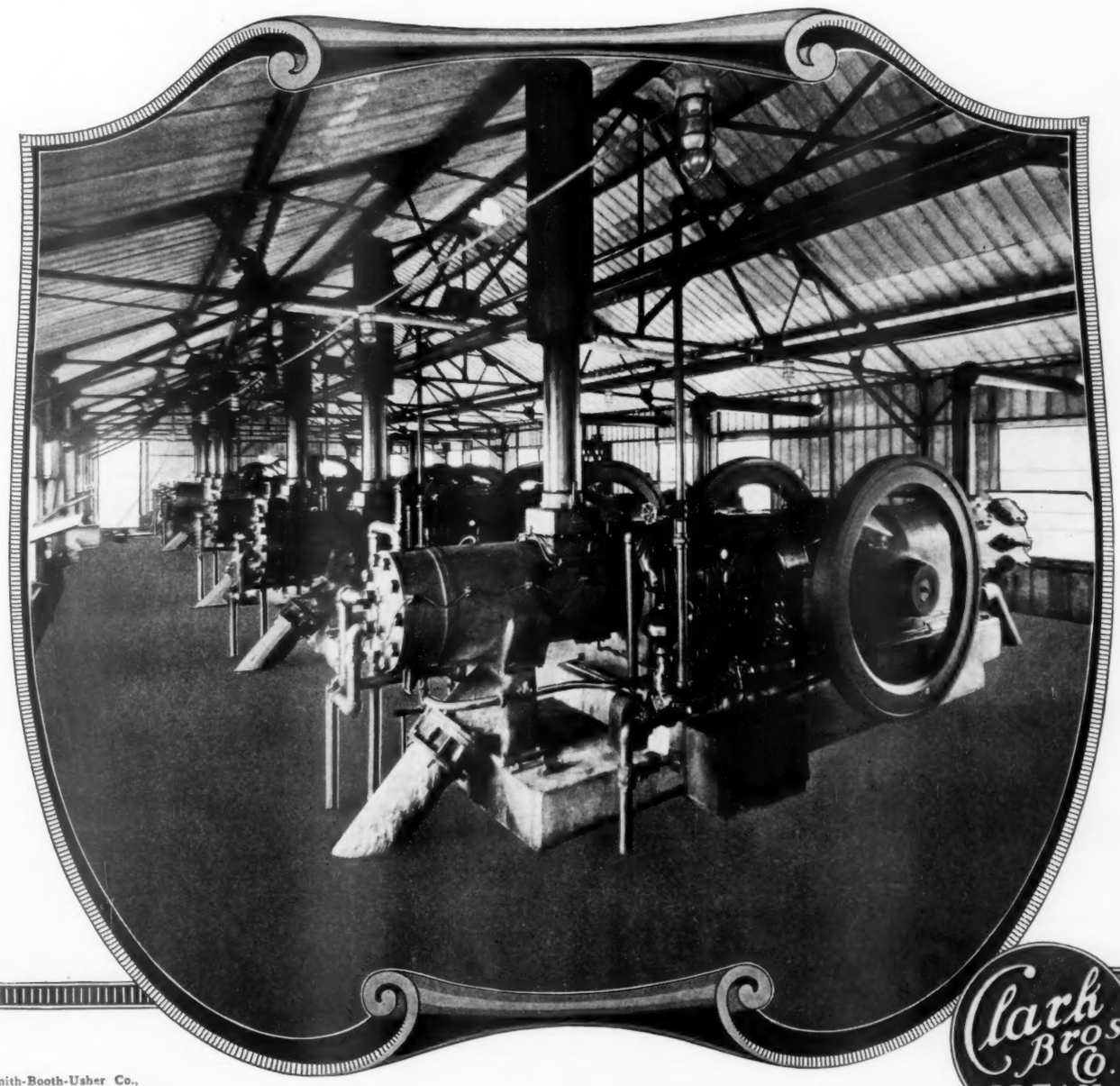

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## STAINLESS STEEL
## CHROME
## MO-LYB-DEN-UM
## STEEL

Strom Balls are held accurate to size to within, plus to minus, .00005 and sphericity to within .000025—*therefore all Strom Balls render a like service.* You can obtain Strom Balls through your regular supply jobber—if not, write us.

We can also furnish Strom "Stainless Steel" and Strom "Chrome Mo-lyb-den-um Steel" in bars for valve seats. These steels are developed by us and are of our own special analyses—the same as used in Strom balls.

## BRASS or BRONZE

Four kinds of balls for working barrel applications. Their quality is evidenced by the fact that

**OVER 85%**

of the balls used in the oil industry are produced by

**STROM**

## Strom Steel Ball Co.

*The largest independent and exclusive steel ball manufacturer*
(Plant at Oak Park, Ill.—suburb of Chicago)

**360 No. Michigan Ave.** **Chicago**


of freight rates would permit shipping the crude polyhalite at a profit.

One producer working on one potash mineral might turn out a product which on account of less expensive method of treatment would enable him to undersell a rival concern refining another potash mineral at greater expense.

This is exactly what Germany and France are doing today. They are able because of rich, easily and cheaply refined potash minerals in solid form, principally the chlorides, to undersell the rest of the world and still show a profit.

**Marketing Problem**

The marketing of potash produced in the Southwest Permian Basin is one of the gravest problems which face prospective producers of potash there.

Freight rates have always been greater from the West to the East than from East to West. A rate of $4.10 a ton to Gulf points from western Texas has been discussed. The greatest users of potash are along the South Atlantic Seaboard and the Mississippi Valley, therefore the producer would have to contend with heavy shipping charges to market his product. The German product can be laid down at Atlantic Seaboard ports for about $5 a ton shipping charges.

There is no tariff at present on incoming potash shipments and because the farmers use 90 per cent of potash consumed in this country and on account of the sad condition of farming in the United States today there is scant chance of a tariff to protect the American potash producer.

Germany has been producing and advertising her potash products for years and will doubtless put up a strong battle by price cutting before it will lose the American market. However, the American market is the least developed big market for potash and will use more and more potash as years go by.

When this country can discover, mine and refine potash products and deliver them to the American farmer cheaper than Germany, we will be independent of foreign supplies. Until then, let's exhaust every reasonable possibility.

## CENTRAL WEST FIELDS

(Continued from Page 70)

& McFrederick are starting a test, 1,300 feet from the south line and 400 from the east line of the George Zeig 50 acres, Lot 32.

In Medina Township, Medina County, the Empire Gas and Fuel Co.'s test in the northeast corner of the C. L. White farm, Section 36, is reported showing for 500,000 feet, of gas. In Liverpool Township, same county, the Chemical Oil and Gas Co.'s test 305 feet from the north line and 936 from the west line of the W. A. Law 79 acres, Lot 20, is rated as good for about 950,000 feet of gas.

The Wiser Oil Co. is drilling a test 600 feet from the south line and in the center of the east and west lines of the H. M. Howard 50 acres, Lot 64, Eaton Township, Lorain County. In Jackson Township, Ashland County, Bert Cameron is drilling a test, 730 feet from the north line and 785 from the east line of the Catherine Findlay 187 acres, Section 35.

In Clear Creek Township, Ashland County, Ringler and others' test in the northeast corner of the Ray Shaw 15 acres, Section 11, is a good gas producer.

The Upham Gas Co. is drilling No. 3 in the southeast corner of the Phil Bross 40 acres, Section 36, Brown Township, Knox County.

The Golden Rod Oil Co. is starting a test in the northwest corner of the I. V. Hartzell 172 acres, Section 12, Washington Township, Hocking County. Bell & Scholl are starting a test in the southeast corner of the E. Harden farm, Section 22, same township Scholl and others are also starting a test in the southwest corner of the George O'Neill farm, Section 25, Starr Township, same county. The Preston Oil Co. is starting a test in the northeast corner of the Cynthia Marks 84 acres, mapped as the George Marks farm, Section 12, Washington Township, same county. The Hope Construction & Refining Co. recently drilled a dry hole in No. 7 on the B. K. and M. Trisch farm, is starting No. 25 on the H. Tracey farm, in the same section. Kachelmacher Estate Section 18, Ward Township, same county. The Ohio Fuel Supply Co. is starting a test in the southwest corner of the C. K. McCarty 40 acres, Section 2, Washington Township, same county.

F. A. Brendel and others are starting a test in the northwest corner of the Jacob and Emma Boettler 152 acres, in Franklin Township, Summitt County. This is a purely wildcat venture.

## KENTUCKY-TENNESSEE

(Continued from Page 70)

southeast from Pellville, the Panther Creek Oil Co.'s No. 19 on the R. M. Miller 100 acres is showing for around 5 bbls. initial.

In Daviess County, in the Whitesville area, or between Whitesville and Pellville, the Leeper Oil Co. is drilling near sand at a second test on the C. D. Veach farm, which is an offset to the same company's No. 3 on the John Roby 90 acres, which was credited with an initial of 8 bbls. Petroleum Exploration Co. is starting a test on the William H. Vaught farm, adjoining the Roby farm; and to the southwest a short distance, the Ohio Oil Co. is starting No. 1 on the F. K. Higdon farm, which is one-half mile away from the Roby wells.

In Allen County, the Tracey Supply Co. is drilling No. 1 on the Ruben Osborn farm, District 2, in the Settle area, north of Scottsville, and R. A. Stohr is drilling No. 12 on the Anthony Welch farm, same district. Lee Moore is shut down at his No. 8 on his No. 2 farm.

**Tennessee**

Advice from the Celina Field of Clay County, Tennessee, is that as soon as the weather improves a large number of tests are to be drilled. The latest completion in the county was well No. 2 on the Barlow Langford farm, located by John H. McClurkin, and estimated good for 100 bbls. initial from a sand at a depth of 420 feet, about 30 feet below the Pencil Cave formation. The new well is an offset to the well on the J. Will Pennington farm, now owned by the Ohio Oil Co. A smaller string of casing will be set to shut off some water that was encountered above the pay sand. The well is owned by the Cumberland Valley Oil Co. of Hopkinsville, Ky., which purchased 100 acres off the west end of the Barlow Langford farm last fall from John H. McClurkin, the discoverer of the Mill Creek Pool.

The Clark-Hill Oil Co. drilled its No. 1 Gray farm to the lower Peterman Bend sand, and has what is reported a 200-bbl. well. This well has a history, being the discovery of the famous Peterman Bend Pool, about 1 mile east of Celina on the Obey River. This well came in December 1, 1925, at a shallow depth, and during the past year has produced many thousands of barrels of oil. This pool is connected to the extension of the Paragon Development Co.'s line, and running some 250 bbls. daily. Several drilling outfits are expected in this pool within a short time. Thomas Wittmer is drilling a test on the Sanders Thurman farm, about 5 miles east of Peterman Bend Pool, near the Obey River. The well is close to 200 feet in depth. The three wells on the Williams farm at Fox Springs have been on the pump about five months and are said to be producing about 80 bbls. daily, the oil coming from the Upper Sunnybrook sand.

G. W. McGinley of Bowling Green, Ky., an old Ohio River operator, spent a few days with John H. McClurkin looking over the field, and will ship a drilling outfit from Kentucky and drill several wells in Tennessee this season.

W. S. M. Hughes of Indianapolis, Ind., expects to start at once a test on Bullard's Creek, in Rough Point district of Jackson County, if the material can be freighted to the location on account of mud and water.

H. C. Kraft, well-known supply dealer and banker of Robinson, Ill., spent several days in Clay County, and has per-

# NEW

**Polish Rod Connections may now be obtained from an old-established manufacturer of Oil Industry Equipment.**

# UNITED

**POLISH ROD SOCKET GRIP**
**POLISH ROD HANGER**
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**POLISH ROD SOCKET TRUNNION**
**FOUR CUP SAND VALVE**

(MANUFACTURED UNDER THE LOOP PATENTS)

## AT YOUR SUPPLY STORE!

NOTE: If for any reason "UNITED" Polish Rod Connections are not obtainable at your particular supply store—Write Us Direct.

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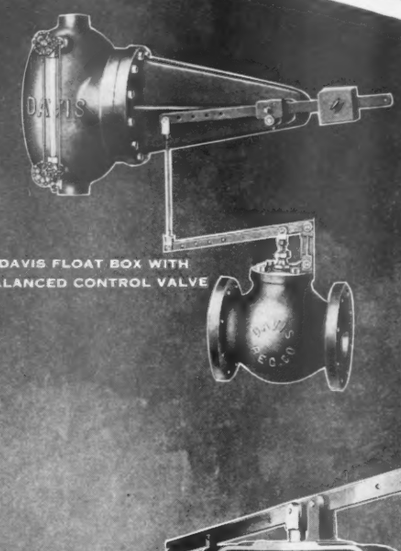
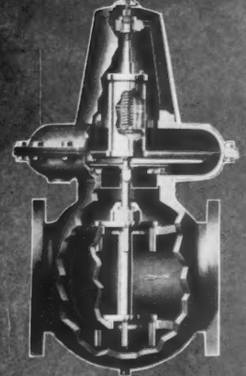
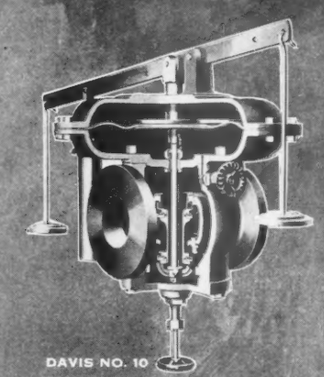



DAVIS FLOAT BOX WITH BALANCED CONTROL VALVE



DAVIS SUPERSENSITIVE RELIEF VALVE



DAVIS NO. 10 GAS PRESSURE REGULATOR

## Sales and Service

WESTCOTT & GREIS
MEASUREMENT AND CONTROL

Dallas TULSA Los Angeles

fected plans for extensive operations when weather permits transporting a rig and material to the properties he acquired.

**Mississippi**

F. N. Henderson of Amory, Miss., writes as follows: "With all four tests going in the Amory sector and two derricks being built in nearby counties and drilling contract closed for another well in Monroe County, activities continue in Northeast Mississippi with more speed than most operators expected a couple of weeks ago, when some felt that interest would subside until the time for a test on the first well to reach the 2,470-foot level. The Buffalo Oil & Gas Co., on the Crook lease in Section 4-13-18, is pounding away at around 445 feet. This company has completed the derrick on a second well located in Lee County, in Section 14-18-6, for which the machinery was shipped last week from Trimble, Tenn., and expected to rig up as soon as its arrival. The Quincy Oil Co., on the Durrett lease in Section 29-13-17, is down around 470 feet. The Amory Petroleum Co.'s tests are drilling in rock, the cable tools on the Hall lease in Section 8-15-17 are below 800 feet, while the Nancy Carter test in Section 12-13-18 have gone to 619 feet with rotary. Night and day crews are being used, and at the Amory Petroleum leases and the Quincy lease living quarters have been built for the crews and all arrangements made to reach the pay sand as soon as possible."

## EASTERN FIELDS

(Continued from Page 68)

was drilled to a total depth of 3,200 feet.

**Clay County**

In Henry district, Clay County, the Stephenson Oil Co. completed a test on the Hively School lot estimated good for 20 bbls. a day. The location is 1,500 feet west of the South Penn Oil Co.'s No. 5 on the R. P. Parker farm.

On Little Sandy Creek, Big Sandy district, Kanawha County, the Ohio Fuel Oil Co. completed a second test on the A. B. Pauley farm. It is a gasser in the Big Injun sand good for 250,000 feet.

On Richwood Run, Grant district, Wetzel County, the Richwood Oil Co. completed No. 14 on the John Mills farm, a natural producer good for 5 bbls. a day.

On McFarlan Creek, Murphy district, Ritchie County, the South Penn Oil Co. completed No. 8 on the H. S. and R. Wilson farm. After a shot it is good for 10 bbls. a day.

**Drilling and Starting Tests**

In Grant district, Ritchie County, the Hope Construction & Refining Co. is building a rig on the Noah Jordan farm and has a rig up on the Andrew Jordan farm. In Smithfield district, Roane County, the United Fuel Gas Co. has made a location on the J. G. Keffer farm. In Sherman district, Calhoun County, the Ohio Fuel Oil Co. has rig material at a location on the A. G. McKinley farm. In the same district, Weaver & Lewis have shut down for orders at 1,835 feet on the Mary Kelly farm. In Center district, W. H. Bickel is due in the sand at a test on the Fannie H. Norman farm.

On Bone Creek, Union district, Ritchie County, D. M. Heckert & Co. have the rig completed for a test on the A. L. Britton farm. On Gillespie Run, Grant district, the Continental Oil & Gas Co. has a rig up on the William A. Ridgeway farm. In Walker district, Wood County, the Richard Oil Co. is due in the sand on the Phillip Kirsh farm. The Hope Construction & Refining Co. is due on the Roberts heirs' farm. Dallman & Kingsbury have a rig completed on the J. R. McCracken farm. In Union district, the South Penn Oil Co. has the rig completed for No. 15 on the John Alleman farm.

In McElroy district, Tyler County, the Alvy Oil & Gas Co. is due in the sand at a test on the W. R. McIntyre farm. In the same district, McIntyre Brothers have a rig up on the Mary Eddy farm. In Green district, Wetzel County, Carr Brothers are drilling a test on the B. Morgan farm. In Grant district, the Shimwell Oil Co. is still fishing on the Joseph Price farm. The well was down 3,053 feet when the tools were lost. Knowlton & Co. are due in the sand on the H. B. Williamson farm. In Liberty district, Marshall County, the Manufacturers Light & Heat Co. has rigs up on the Samuel C. Howell, L. A. and E. C. Pyles and R. A. Marple farms. In West Union district, Doddridge County, the same company is drilling on the Charles Cheverout farm. In New Milton district, the same company is fishing on the Henry Ahouse farm.

**Wetzel County**

In Church district, Wetzel County, Walter Null is drilling at 3,324 feet on the C. J. Bartrug heirs' farm. In DeKalb district, Gilmer County, J. G. Roberts is fishing for a string of tools on the J. S. Beall farm. In Otter district, Braxton County, the Exchange Gas Co. is rigging up on the A. H. Cutlip farm. In Jefferson district, Lincoln County, the Hope Natural Gas Co. has a rig up on the Claude Linville farm. The Cambridge Gas Co. is drilling on the Columbus Carnes farm. In Grant district, Cabell County, the Monickel Gas Co. has skidded the rig and started a new hole on the C. A. Nicols farm.

On McFarland creek, Murphy district, Ritchie County, Cochran & Hays have started to spud at a test on the McGregor heirs' farm. In Walker district, Wood County, L. P. Bickel & Son have started to drill on the Edward Hammett heirs' farm. In the same district, the Hope Natural Gas Co. is hauling tools to a location on the W. B. Cunningham farm. In Center district, Calhoun County, the same company has started to drill on the A. L. Gainer farm. In Otter district, Braxton County, the Philadelphia Gas Co. has shut down at 2,700 feet on the Melissa Tollyson farm. In Murphy district, Ritchie County, Ira Haught has a rig up on the William M. Nutter farm.

## MICHIGAN FIELDS

(Continued from Page 68)

others' No. 1 Burdow property, at Clark and Fayette Streets.

Saginaw Prospecting Co.'s No. 1 George Griebel property, on the Shattuck Road west of Hermansau Road, is due for completion within a few days. Several other wells are around the 1,000-foot depth and possibly a dozen around 700 to 800 feet.

**New Wells Starting**

Saval Development Co. is starting No. 1 on the Cuthbertson property, on the Bay Road north of the Shattuck Road.

The Sun Oil Co. has staked a location for No. 1 on the John Stelzreide and others' property, on Bar Road north of Shattuck Road, also a location for No. 3 on the J. W. Weiss farm, Section 11, Saginaw Township, where the company drilled its initial well in the field.

J. H. Shaltry and others are starting a second well on the John Bretchelsbauer property on North Michigan Avenue, near Madison Street in Carrollton.

Fordney Petroleum Co. is starting No. 1 on the Glen Gardner property, on Schaefer Street near Clark Street.

Sun Oil Co. is drilling a second well on the Louis Voight farm, on the Shattuck Road in the southeast quarter of Section 10, Saginaw Township. William Bradley and Son are drilling No. 1 on the Clarence Clark property at Clark and Hanchett Streets.

**O. K.'s Oil Well Measure**

Word comes from Lansing, the capital of the Wolverine State, that the State Affairs Committee of the Senate has reported out the oil well bill sponsored by Senator Chester M. Howell, of Saginaw. It makes the director of conservation state supervisor of oil wells. The measure has the indorsement of the well drillers and operators in general in the Saginaw Field.

Drillers will be obliged to protect all water and minerals of value, and precautions must be taken not only in drilling a well but in case it is abandoned so there will be no contamination of the various strata by migration of brine, etc.


**This is No. 32 of a series on specifications—keep for reference in ordering.**

# BARSCO PRODUCTS

## *for Oil and Gas Well Drilling*

*Forged* *Steel*

BARSCO Die Nipples, male and female or combination, are constructed from special *forged steel* having a tensile strength of from 90,000 to 110,000 pounds.
The flutes are fabricated so as to shut off water.
The name BARSCO stamped on each nipple is your guarantee of lasting service—place your order for BARSCO.

***SPECIFICATIONS***

| Size Pipe, Inches | Length, Inches | Weight, Pounds |
|---|---|---|
| 2 | 10 | 15 |
| 2½ | 10 | 15 |
| 3 | 10 | 15 |
| 4 | 10 | 20 |
| 4½ | 10 | 20 |
| 4¾ | 10 | 20 |
| 4⅞ | 10 | 20 |
| 5⅛ | 10 | 20 |
| 6 | 11 | 30 |
| 6¼ | 11 | 30 |
| 6⅝ | 11 | 30 |
| 8¼ | 12 | 40 |
| 10 | 12 | 60 |
| 12½ | 14 | 105 |
| 14 | 15 | 115 |
| 15½ | 15 | 150 |
| 16 | 15 | 150 |
| 18 | 16 | 170 |
| 20 | 16 | 195 |

Intermediate sizes, also sizes larger or smaller than listed can be furnished.

Note:—Smallest inside measurement is the same as inside diameter of pipe or casing on which nipples are to be used. In ordering, give size, weight, pitch of thread and make of casing on which nipple is to be used and also size and weight of casing through which nipple is to pass.

*Stocks carried by Dealers.*

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***—Write for Complete Catalog***

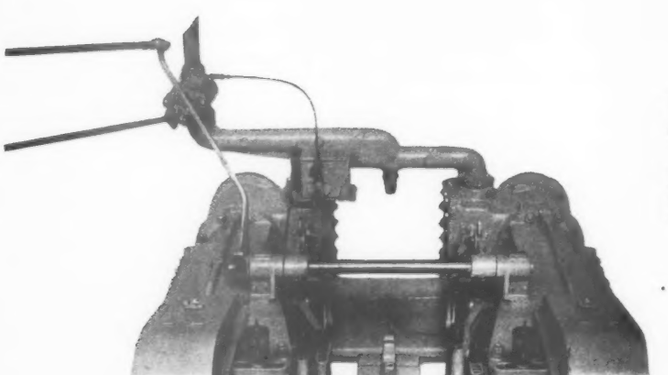
# The Most Advanced Oil

The advantages of splash lubrication, first introduced to oil field steam engines in the Ideal-Ajax 12x12 twin, have caused insistent demands for the enclosed type 10x10.

## The Ideal Ajax 10 x 10 Twin

*is now manufactured with Enclosed Crankcase*

These demands are now met in the new Ideal-Ajax. Like the larger model this engine gives complete splash lubrication of piston rod, cross head guides, cross head pin, crank pin and main bearings.

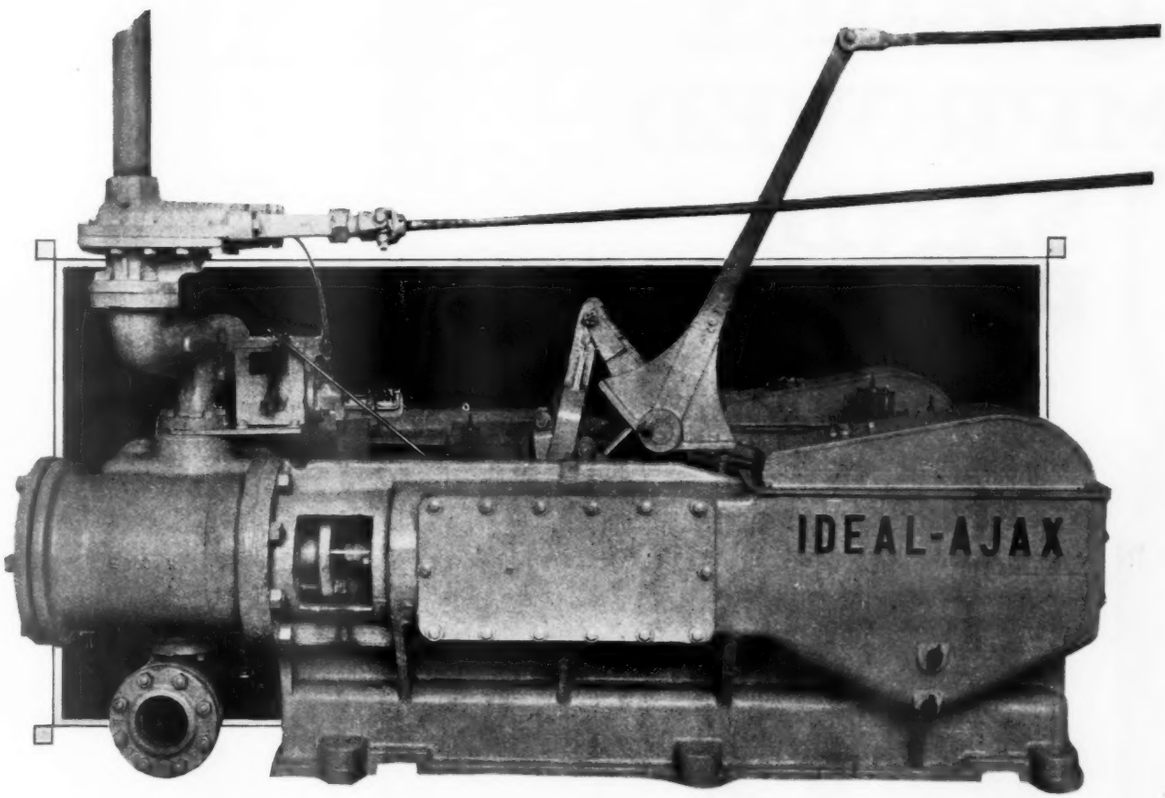


Ideal-Ajax 10x10 Twin Drilling Engine with Enclosed Crankcase.

AJAX ENGINES

# IDEAL DRILLING

# Well Drilling Engine...




In addition the new 10x10 has new refinements which have just been developed for Ideal-Ajax Engines. These include redesigned frame castings with holes for holding down cable, bronze bushing between eccentric links and straps, and a new reverse link lifter that makes reversing easier.

Made by
AJAX IRON WORKS
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THE NATIONAL SUPPLY COMPANIES
In every oil field

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LARKIN

IMPROVED

SAND PUMP

Furnished with either or both of these bottoms

Regular Bottom

Bit Bottom

will clean out your wells more quickly and do a better job than any sand pump made.

*Write for Circular and Price List*

*Manufactured only at Butler, Penna., by*

LARKIN & CO

*Sold at any of the leading supply stores*


Before wells may be drilled applications must be made to the director of conservation who will issue the necessary permits.

**Wants Pennsylvania Prices**

Efforts to obtain a change in the classification of Saginaw crude oil that will result in a better price were launched by the Saginaw Valley Oil Producers' Association at a meeting of the board commerce at which the effects of the 29-cent cut in price of crude were discussed, says the News-Courier.

The association went on record as believing that Saginaw crude prices should be based on those of Pennsylvania crude rather than on Oklahoma crude, the contention being that the local production is of a high quality and entitled to rank with the Pennsylvania oil which is bringing a materially higher price.

President James C. Graves of the association was instructed to appoint a committee to confer with officials of the Sun Oil Co. and the National Refining Co. whether such a change can be made. These two companies at present are purchasing all the Saginaw crude.

While the association confined its action in the matter to authorizing this committee there was an informal discussion of other proposals bearing upon the situation. One was for suspension or curtailing of pumping, while the other related to the possibility of building a refinery here to handle Saginaw crude.

President Graves told the producers that the refinery project is being given consideration at present, though no definite action has been taken and detailed studies of the situation have not yet been completed.

"I don't think that anybody wants to go into the refinery business, but if the price situation is unsatisfactory we may have to do it," said Mr. Graves.

Mr. Graves presented figures to the oil men bearing upon comparative prices of Saginaw oil and that from the Pennsylvania and other fields. Saginaw oil now is selling for $1.74 a barrel, a decline of $1.21 since last November, while Pennsylvania crude in Buckeye pipe lines which he said is of comparable quality is now selling for $2.85, a drop of only 20 cents in the same period, he said. Corning and Lima oil, both of them Ohio crudes, which he said are of quality inferior to that of Saginaw oil, are selling for $1.71 and $1.65 respectively, he said.

Other problems affecting the oil industry were discussed. Appointment of a committee to confer with City Assessor Spindler regarding the tax situation was authorized and it was reported that the proposed bill to regulate plugging and abandoning and other aspects of well operation has been introduced in the State Senate.

## NEW LOCATIONS

(Continued from Page 84)

150 feet north and 195 feet west of SE cor. of their 30-acre lease "B" W. P. Zuber Survey, A-887. Continental Oil Co.'s No. 19 N. J. Howard and others-A, 550 feet south and 150 feet west of NE cor. of their 120-acre lease "A" out of J. Chambliss Survey, A-123; No. 20 J. W. Maddox-A, 200 feet south and 1,420 feet east of NW cor., Lot 13, S. H. Arnold Survey, A-5; No. 13 J. W. Rowland and others-B, 535 feet north and 550 feet east of SW cor. of their lease "B" H. Votaw Survey, A-827; No. 8 Mrs. M. H. Salmon and others, 1,470 feet south and 1,215 feet west of the most easterly NE cor. of their lease out of W. P. Zuber Survey, A-887. F. H. E. Oil Co.'s No. 1 N. J. Howard and others-D, 2,250 feet south and 2,200 feet west of NE cor. of J. Chambliss Survey, A-123, being 150 feet south and east of NW cor. of their 20-acre lease "D," Pure Oil Co.'s No. 3 J. E. Crowe and others, 1,020 feet north and 200 feet east of SW cor. of their 100-acre lease J. Chambliss Survey, A-123; No. 7 J. W. Maddox-C, 200 feet north and 1,205 feet east of SW cor. of their 50-acre lease "C" out of C. W. Thompson Survey, A-741. Stoneman & Staniforth's No. 1 P. F. Hutson, 150 feet north and 2,750 feet west of SE cor. of M. E. P. & P Survey, No. 55. Beckner & Pace's No. 1 J. G. Crump, C of SW 40 acres of J. G. Crump's 75-acre tract C. E. Holmes' Survey, A-1,627.

**Pecos County**

Arkansas Fuel Oil Co.'s No. 1 M. Holmes, 2,040 feet north and 1,520 feet west of SE cor. of Section 16, Block 178, T. C. R. R. Survey. Buell & Hagen's No. 1 Jasper County School Land, 5,280 feet south and west of NE cor. of Jasper County School Land Survey, No. 1, Block 104. Carland & Mott's No. 1 El Paso Cattle Loan Co., 1,520 feet south and west of NE cor. of Section 26, Block 126, T. & St. L. R. R. Survey. Texon Oil & Land Co.'s No. 2 I. G. Yates, 660 feet south and west of NE cor. SW, Section 55, Block 1, I. & G. N. Survey; No. 3, 660 feet north and 1,320 feet east of SW cor. NE of the same section. John Droppelmann's No. 1 Mrs. L. Hershanson, 1,650 feet north and 330 feet west of SE cor. of Section 7, Block 51, T. & P. Survey. Quinby and others' No. 1 A. A. Gray, 660 feet north and 1,320 feet west of SE cor. Section 593, A-3,009.

**Shackelford County**

Amerada Petroleum Corp.'s No. 3 W. Y. & R. A. Davis, 150 feet south and east of NW cor., Section 16, Block 14, T. & P. Survey. H. Gwinnup and others' No. 1 Goodwin & Walker, Section 84, 660 feet south and east of NW cor. NE SW, Section 84, Block 13, T. & P. Survey. Hope Oil & Gas Co.'s No. 16 W. D. Reynolds, 150 feet south and 750 feet east of NW cor., Section 24, Block 11, same survey. Osage Oil Corp.'s No. 1 L. H. Hill, 660 feet north and west of SE cor., Section 17, Blind Asylum Land. Roeser & Pendleton's No. 49 W. I. Cook-A-60, 1,195 feet north and 1,050 feet west of SE cor. W half of W. I. Cook's tract in Section 59 and located in Section 60, Block 10, E. T. R. R. Survey; No. 50, 870 feet north and 1,350 feet west of SE cor. W half of the same 59-acre tract; No. 51, 150 feet north and west of SE cor. NE NW, same section; No. 19 W. I. Cook-C-60, 515 feet north and 150 feet east of SW cor. NW NE, same section; No. 6 W. I. Cook-F-60, 1,500 feet north and 1,050 feet east of SW cor. E half of W. I. Cook's same 59-acre tract; No. 7, 1,840 feet north and 1,050 feet east of SW cor. E half of the same 59-acre tract; No. 7 R. J. Moberly-B-12, 880 feet north and 530 feet west of Section 12, T. & P. Survey; No. R. J. Moberly-B-12, 150 feet north and 470 feet west of SE cor. of the same section. J. K. Simmons' No. 2 B. C. Harvey, 330 feet south and east of NW cor. SW, Section 6, Block 14, same survey.

**Stephens County**

Texas Consolidated Oil Co.'s No. 9 O. S. Martin, 2,000 feet south and 2,250 feet east of NW cor., Section 1,041, T. E. & L. Survey.

**Taylor County**

Roeser & Pendleton's No. 1 Sam Butman, C W half NW, Section 64, Block 7, T. & P. Survey.

**Throckmorton County**

Humble Oil & Refining Co.'s No. 1 R. S. Langford, 465 feet north and west of SE cor. NE, Section 987, T. E. & L. Survey.

**Winkler County**

Southern Crude Oil Purchasing Co.'s No. 3 T. C. Hendricks-C, 2,310 feet south and 330 feet west of NE cor., Section 33, Block B-5, Public School Land.

**Upton County**

Dixie Oil Co.'s No. 13 E. S. Hughes, 975 feet south and 790 feet west of NE cor. of west 100 acres of William Teer Survey, No. 4, A-806. Independent Oil & Gas Co.'s 94 L. Taylor, 860 feet north and 330 feet west of SE cor. of S. T. Sapp Survey, No. 6. Roxana Petroleum Corp.'s No. 15 Della Bowen, 1,650 feet north and 990 feet west of SE cor., Section 6, G. C. & S. F. Survey, A-1,057; No. 16, 330 feet north and 1,650 feet west of SE cor. of the same section; No. 17, 1,595 feet south and 1,650 feet west of NE cor. of the same section; No. 19, 1,820 feet south and 1,650 feet east of NW cor. of the same section; No. 20, 2,480 feet south and 1,650 feet east of NW cor. of the same section; No. 21, 2,085 feet north and 990 feet east of SW

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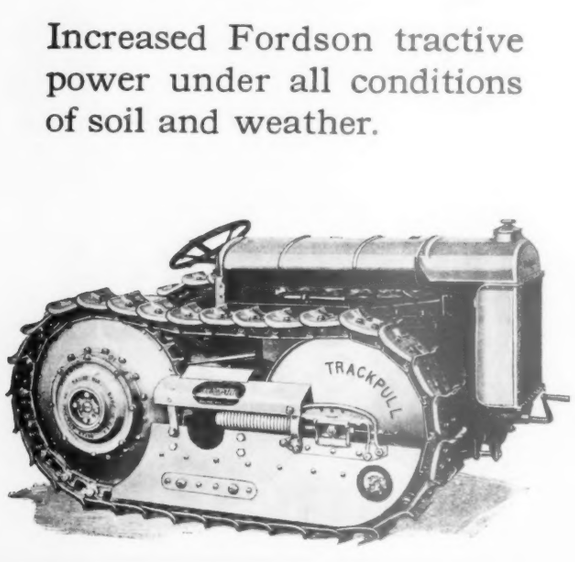


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cor. The Texas Company's No. 24 King, 2,060 feet north and 330 feet east of SW cor., Section 11, Block 3½, C. C. S. D. & R. G. N. G. Survey.

**Wichita County**

Bullington, Lee & Pendleton's No. 6 Grace Jennings-B, 755 feet south and 615 feet east of NW cor., Section 8, H. T. & B. Survey, A-475. Cooper & McLaughlin's No. 5 M. A. Love, 150 feet north and 700 feet east of SW cor. of north 25 acres of Lot 11, W. S. Kennard Survey, A-171. Frank Boldwin's No. 1 W. T. Waggoner, 3,500 feet NE of SW line and 8-100 feet NW of SE line of A. Gibson Survey, A-455, being 250 feet south and 450 feet west of NE cor. of Lot 14; No. 2, 3,800 feet NE of SW line and 8,250 feet NW of SE line of the same survey, being 150 feet south and west of NE cor. of Lot 14; No. 3, 3,275 feet NE of SW line and 8,000 feet NW of SE line of the same survey, being 390 feet south and 690 feet west of NE cor. of Lot 14, and located in Lot 13. George Pace and others' No. 2 T. F. Mitchell, 165 feet south and east of NW cor. of east 30 acres of Lot 7, T. F. Mitchell Subdivision and located in Patience Castleman Survey, A-56. Golding-Cochran and others' No. 1 J. L. and T. J. Waggoner-V, 150 feet south and 105 feet west of NE cor., Lot 34, Hezekiah George Survey, A-454. Magnolia Petroleum Co.'s No. 3 Bertha Ramming, 2,050 feet south and 200 feet east of NW cor. of east 145 acres of R. & B. Ramming's 260-acre tract and located in Section 4, H. T. & B. Survey, A-474. Petroleum Producers Co.'s No. 6 Allen & Kemp-D, 1,980 feet south and 1,254 feet east of NW cor. of Block 28, Kemp's Wichita Valley Lands. G. Wallace's No. 2 T. L. Burnett, 150 feet south and east of NW cor. of east 337 acres of north 675 acres of T. L. Burnett's 1,348-acre tract out of James Bradford Survey, A-27.

**Young County**

King Roy & Tidal Oil Co.'s No. 28 S. M. J. Benson, 750 feet south and 150 feet west of NE cor. of west 33 acres S half, Section 1,450, T. E. & L. Survey. Robert Oil Corp. and others' No. 1 I. C. Little and others 730 feet north and 840 feet east of SW cor. of I. C. Little and others' 159 acre tract out of I. Holman Survey, A-130. Atkinson & Sandefer's No. 5 H. M. Ford, 250 feet north and west of SW cor. of J. W. Boozer's 125-acre tract out of J. Garrett Survey, A-108, and located in W. T. Carter Survey, A-62. Canyon Oil & Gas Co.'s No. 1 A. M. Graham, 590 feet south and 200 feet west of NW cor. of J. H. Mitchell's 180-acre tract and located in A. M. Graham tract out of Paul Pier Survey, A-219. Independent Oil & Gas Co. and others' No. 1 Costallo Brothers, 1,200 feet SE of NE cor. and 200 feet SW of the NE line of Section 1, J. Poitevent Survey, A-232. Nash & Windfohr's No. 1 John Ware, 920 feet south and 200 feet east of NW cor. of John Ware's 70-acre tract out of J. W. Manning Survey. Pitzer & West's No. 1 The Aller Co., 200 feet north and east of the most southerly SW cor. of J. H. Wood Survey, A-1,658. Roxana Petroleum Corp.'s No. 3 Mrs. S. I. Payne and others, 550 feet north and 240 feet west of SE cor. of W. E. Smith Survey, A-1,762.

## LA.-ARK. WILDCATS

(Continued from Page 61)

vey's No. 1 Simmons, Section 15-18-13, is drilling at 1,348 feet; 12½-inch pipe was set at 150 feet. Rovenger Oil Corp.'s No. 1 McCain, Section 4-17-14, is drilling at 805 feet. Superior Oil Co.'s No. 2 Cordell, Section 5-18-13, is drilling at 2,100 feet. Salt water sand was cored at 2,920 feet at Superior Oil Co.'s No. 1 Jerry, Section 32-17-13.

**Ouachita County**

Ten-inch casing was set at 40 feet and the second hole for A. T. Grayson's No. 1 Reynolds, Section 21-14-17, is down 1,075 feet and drilling ahead. J. G. Reynolds' No. 1 Chandler Estate, Section 3-14-18, is shut down for orders at 1,850 feet. Sunny Jim Oil Co.'s No. 12 Berry, Section 33-15-15, tested salt water at 3,976 feet and is being cored at 4,076 feet.

**Bradley County**

Magnolia Petroleum Co.'s No. 1 Arkansas Timber Co., Section 33-15-11, is drilling sandy lime at 4,220 feet.

**Clark County**

Whelen Oil Co.'s No. 1 Burrow, Section 35-10-20, setting 12½-inch pipe at 47 feet.

**Grant County**

Shaffer Oil Co.'s No. 1 Youngblood, Section 34-4-13, was abandoned on top of the Palezoic rock at 2,278 feet.

**Lafayette County**

Arkansas Fuel Oil Co.'s No. 1 Duty, 260 feet north and 295 feet east SW cor. NW SE, Section 11-19-25, is a derrick.

**Miller County**

Lenz and associates' No. 2 Dale, Section 28-15-26, is being reamed to the bottom at 2,765 feet.

**Bienville Parish**

Kimbrough and others' No. 1 Cargle, Section 27-15-8, the only test which has been active in Bienville Parish, has been shut down. It is at a depth of 1,550 feet.

**Bossier Parish**

One of Bossier Parish's wildcat tests was completed as a gasser the past week. It is Bahan and others' No. 1 Mays, Section 27-23-12, and is estimated as making 35,000,000 feet from sand at 3,084-86 feet. Bethany Oil & Gas Co.'s No. 1 Dodson, Section 16-23-12, tested dry at 2,710 feet and at 2,718 feet. Anderson & West's No. 1 Bulkey, Section 9-20-13, has been shut down at 2,040 feet. Clark & Norton's No. 1 Ford is drilling at 1,900 feet. In Section 2-18-12, Harrell Drilling Co.'s No. 1 Atkinson is down to 745 feet. Louisiana Oil & Refining Co.'s No. 1 Blanton, Section 23-23-12, is drilling lime at 1,792 feet. In Section 15, Magnolia Petroleum Co. has cemented the 13⅜-inch casing at 447 feet, drilled out the plug and now is at 800 feet. Simms Oil Co. has a derrick up for No. 2 C. D. Sandidge, Section 5-18-11, but has not started drilling. Ten-inch casing has been set at 883 feet by Sligo Syndicate's No. 1 Webb, Section 24-17-12. Total depth of the hole is 2,392 feet. The same interests have a derrick up for No. 1 Jeter in Section 23. The Triangle Drilling Co. and W. D. Perritt in Section 13-20-14, also have a derrick for No. 1 Levy. Woodley & Collins and Atlantic Oil Producing Co.'s No. 2 L. & A., Section 14-23-12, is to test 7 feet of broken sand at 3,074 feet.

**Caldwell Parish**

Humble Oil & Refining Co. is at 68 feet with a 10-inch hole in its No. 4-A La Central, Section 12-11-2e. Hencey P. Mack's No. 1 Shaw, Section 22-14-2e, still is shut down at 1,630 feet.

**Claiborne Parish**

Standard Oil Co. of Louisiana has abandoned its No. 1 Mitchell, Section 29-21-7. Salt water was struck at 2,096 feet. El Dorado Chief Oil Co.'s No. 1 McElwee, Section 13-22-7, is being washed to the bottom at 3,040 feet. In Section 16-22-8, Magnolia Petroleum Co. is drilling its No. 1 Lee in sandy shale at 2,678 feet.

**DeSoto Parish**

DeSoto Parish got a wildcat producer in Magnolia Petroleum Co.'s No. 1 Mason, Section 28-12-11. The well has been completed for 60 bbls. at 2,715 feet. Craise & Hintz are drilling in sandy shale at 3,006 feet in their No. 1 Riggs, Section 27-14-13. Dixie Oil Co.'s No. 1 Jenkins, Section 9-12-11, is drilling in brown lime at 5,262 feet. Magnolia Petroleum Co. is starting a derrick for No. 1 Logan, Section 17-10-12. William Sebastian Syndicate has a derrick up for No. 1 D. H. Sebastian, Section 11-10-13. Seip and others have rigged up for No. 1 Roberson, Section 18-10-12, Pleasant Hill district, but have not started drilling.

**Grant Parish**

Paulette and others have completed No. 1 Holmes, Section 17-9-1e, Georgetown area, flowing what is estimated to be about 300 bbls. of clean oil at 1,597-1,603 feet. Gulf Refining Co. has abandoned No. 3-A L. C. Swope, Section 8-9-1e, as dry at 2,383 feet. J. J. Rob-

erts' No. 1 Croom, same section, also was dry at 1,598 feet and has been abandoned. Salt water was struck at 1,620 feet in Word & Phelps' No. 1 Holmes, Section 20-9-1e, and it has been abandoned. Humble Oil & Refining Co. has abandoned the derrick at No. 11-A L. & A., Section 20-9-2w, while in Section 17-9-1e, Holmes and others have abandoned derricks at No. 1-A Holmes, No. 2 Holmes and No. 3 Holmes. Gulf Refining Co. is rigging up No. 2-B L. C. Swope, Section 12-19-1w. Rue and others' No. 1 Elias & Williams, Section 10-7-4w, is shut down at 1,300 feet.

**Franklin Parish**

Drilling has been suspended at Exploration company's No. 1 Moore, Section 12-11-6e, because of high water. The test is at 2,120 feet.

**Jackson Parish**

Charles A. Ferguson's No. 1 Martin, Section 5-15-1e, has been shut down at 3,475 feet.

**LaSalle Parish**

Tunica Petroleum Co.'s No. 23 L. & A., Section 9-7 2e, found salt water at 779 feet. It tested a small showing of oil at 770 feet. The same company is rigging up No. 25 L. & A., Section 6-8-3e.

**Natchitoches Parish**

Gulf Refining Co. made location for No. 1 Cobb.e & Hardaman, Section 9-7-7w. Ohio Oil Co. is drilling at 2,856 feet in its No. 1 L. & A., Section 23-13-6w. The same company has a location for No. 1 S. F. Thomas, the same section. H. O. Readheimer's No. 1 Wafer, Section 3-11-8, is drilling rock at 370 feet. Tunica Petroleum Co.'s No. 24 L. & A., Section 35-13-6w, is drilling at 1,000 feet.

**Red River Parish**

Amerada Petroleum Corp.'s No. 1 Long Bell Lumber Co., Section 5-13 9, is shut down at 1,310 feet. The Gulf Refining Co. is setting 6⅝-inch casing at 2,485 feet in No. 37 Robinson, Section 25-13-11. Magnolia Petroleum Co. is drilling in gumbo at 2,143 feet in No. 24 Polly, Section 6-12-10. Phillips Petroleum Co. is drilling chalk rock at 1,605 feet in No. 1 Long Bell Lumber Co., Section 16-12-8. The Texas Company is drilling shale at 2,518 feet in No. 35-B Brinkenhoff, Section 30-13-10.

**Richland Parish**

Gulf Refining Co. has killed a blowout in No. 1 Mansfield, Section 30-17-6e, and is arranging to deepen it. The hole is at 2,358 feet. The Gulf Refining Co. has set 15½-inch casing at 128 feet and is drilling at 400 feet in its No. 2 Rhymes, Section 5-16-6e. The same company has derricks up for No. 1 Seibert, Section 35-17-5e, and No. 2 Seibert, Section 11-16-5e. It is drilling at 2,335 feet in its No. 1 Wayne, L. & T. Co., Section 36-17-5e. S. D. Hunter has drilled out the 6⅝-inch plug at 2,314 feet in his No. 1 McCoy, Section 29-16 6e. The Louisiana Petroleum Co. has shut in No. 1 Binion & Sartor, Section 22-17-6e, at 2,474 feet, after it had been bailed and started to blow in. Harry E. Oliver and others will try to set casing in their No. 1 Hatch, Section 2-15-5e. The test is at 2,316 feet. Ruston Drilling Co. is in hard lime at 2,432 feet in its No. 1 O'Neil, Section 35-17-6e. Standard Drilling Co. has set 12½-inch casing in No. 1 Delta Hardwood Co., Section 22-16-7e. Stovall Drilling Co. has set 8-inch casing at 915 feet in No. 1 Mitchell, Section 20 17 6e. Texas-Louisiana Carbon Co. is drilling shale at 2,069 feet in No. 1 Broughton, Section 1-16-6e.

**Sabine Parish**

Godchaux and others have abandoned as dry their No. 1 Giauque, Section 36-5-13. It was at a total depth of 1,518 feet. Arkansas Fuel Oil Co. is drilling lime at 3,080 feet in No. 3 Logan Oil Co., Section 33-10-12. In No. 4, Logan Oil Co. is drilling shale at 2,615 feet. No. 5, Section 28-10-12, is in lime at 2,890 feet. Beckman & Freeman are drilling at 75 feet in No. 1 Logan Oil Co., Section 26-10-12. Magnolia Petroleum Co. is building a derrick for No. 1 Hall, Section 33-10 12. The same company is drilling in shale at 3,035 feet in No. 1 L. L. L. Co., Section 11-6-11. Moffett and others are in chalk rock at 1,740 feet in their No. 1 Moore, Section 5-9-12. Ohio Oil Co.'s No. 1 Cook Land Co., Section 34-10-12, is in gumbo at 2,287 feet.

**Winn Parish**

Two Winn Parish tests were abandoned during the week. Liggett and others have torn down the derrick for No. 1 Albritton, Section 27-10-1e, and have abandoned the location. Humble Oil & Refining Co.'s No. 19-A L. & A., Section 31-10-2w, has been abandoned as dry at 1,505 feet. Dodge P. Cordell will make a Halliburton test at 1,042 feet in No. 1 Fremont, Section 35-13-3w. Greer & Gault are drilling at 3,110 feet in shale and boulders in their No. 1 Podeau, Section 9-11-4w. Ohio Oil Co.'s No. 2 Edenborn, Section 4-12-1w, is in lime at 4,340 feet. The same company has a location for No. 1 McCarty, Section 5-12-1w. Rowe and others have built a derrick for No. 1 Urania, Section 26-11-1e. F. A. Schuman is waiting for casing for No. 1 Albritton, Section 27-10-1e. The test is at 1,517 feet. Standard Oil Co. of Louisiana's No. 1 Tremont, Section 1-12-2w, is in lime at 3,527 feet.

## CALIFORNIA FIELDS

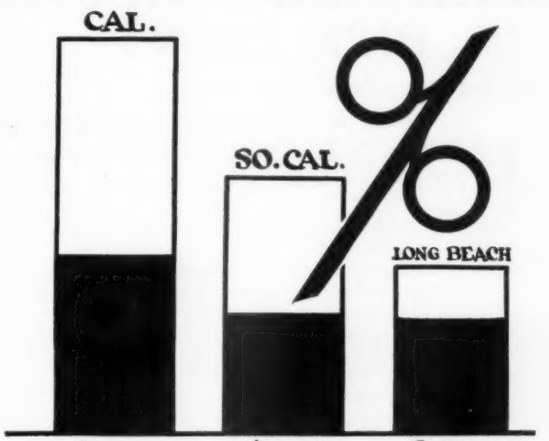
(Continued from Page 64)

at Seal Beach consists of the erection of derricks and the installation of rotary equipment, boilers and other necessary appurtenances, but one must not get the impression that conditions will ease up as soon as this preliminary work has been completed, for most of those drilling realize that only a limited number will participate in the flush production. With this idea in mind work is being pushed ahead with the utmost speed, and in several cases substantial bonuses have been offered for the speedy erection of rigs and installation of equipment. There are at the present time approximately 75 rigs in course of construction, most of which should be ready for spud within a comparatively short time. This is in excess of those wells already under way and of the 75 derricks now going up it is believed that at least 50 of them will be listed as drillers within the next 10 days.

The Pan American and Paul Getty, the first two operators to get under way on any substantial scale due to the fact that most of their respective holdings were located just outside the limits of the town lot section and therefore unrestricted, are staging a fast race, not merely for the distinction of reaching the pay first but because of their desire to get the cream of production while the getting is good. The writer has covered every town lot area developed in California up to the present time and, while some remarkable records were established at Huntington Beach, Long Beach, Santa Fe Springs, Torrance and Rosecrans, development work in these fields did not proceed with the rapidity with which work is going ahead in the newly-opened town lot area at Seal Beach. This is due, of course, to the fact that no one was allowed to start drilling at Seal Beach previous to the lifting of restrictions and thus all operators started off practically simultaneously. The result is obvious for a delay of several days might mean the difference between a large and small flowing well, or possibly a pumper if the sand does not have normal thickness and saturation.

**Making Good Time**

One of the outstanding features in connection with the development work in the town lot section at Seal Beach is the fast footage being made in several drilling projects. One can hardly believe that it is possible to drill a 4,750-foot well into production in less than six weeks but both the Pan American and Paul Getty will accomplish this feat unless mechanical trouble should develop at the last minute. Both of these operators should finish a producing well within the next 10 days and will more than likely bring in two more a short time later. Practically all of the major companies are represented at Seal Beach, with the ex-

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ception of the Union and Shell, and while these two might later get in the swim, this is hardly likely because of their attitude with respect to town lot development. The Standard, Associated and Marland are not engaging in town lot drilling but are on the other hand developing substantial acreage. The California Petroleum, General Petroleum, George F. Getty, Miley, Richfield, Superior Oil Co. and some 25 or 30 others are actively at work in the town lot section but the property being developed by these operators are not single lot locations, as several fairly large community leases are held.

The bugaboo of all successful producers, water trouble, is receiving considerable attention at Seal Beach because of the fact that three or four wells have shown an increased water content during the past few weeks. The wells in question are Nos. 2 and 5 on the Bixby lease of the Marland and Nos. 4 and 6 on the San Gabriel property of the Standard. Those who have made a close study of these four wells express the opinion that the water which they are showing cannot be attributed to edgewater intrusion but is rather due to faulty shutoffs. In any event, the wells will be watched very closely because of their possible effect on the future production from the Bixby zone. They have no bearing whatever on the deeper prolific Selover zone approximately 300 feet lower down.

**Five Completions**

There were five new wells finished in the older section of the Seal Beach Field and three or four more are expected in momentarily. The Marland finished two new producers and incidentally boosted its daily production 3,300 bbls. This company is running about 18,000 bbls. of pipe line oil daily followed by the Standard with a production of around 9,000 bbls. and the Associated and Pan American with 2,500 bbls. each. Both of the Marland's new wells were located on the Bixby lease and each was finished in the upper or Bixby zone. No. 7 is flowing 1,660 bbls. of clean 23.1 gravity oil daily from 4,464 feet, while No. 9 is doing 1,640 bbls. from an even 4,400 feet. The Standard brought in Nos. 8 and 9 on the San Gabriel property. The former is flowing 1,945 bbls. of clean 26.1 gravity oil while the latter is making 2,071 bbls. of 25.8 gravity oil daily. Both were finished in the deep prolific Selover sand, No. 8 being drilled to 4,710 feet and No. 9 to 4,730 feet. Coincident with the completion of these two new wells, the company's No. 7 San Gabriel built up from its initial flow of 1,240 bbls. last week to 1,625 bbls. a few days ago. The Associated's No. 3 Bryant, which made a preliminary flow about 10 days ago, is now on steady production. It is making 740 bbls. of clean 24.5 gravity oil daily from 4,387 feet. It is a Bixby zone completion and this lease is incidentally higher structurally than any other productive property in the field at the present time.

**Huntington Beach**

The San Martinez Oil Co.'s outpost on Ninth Street, the most easterly drilling project in the Huntington Beach town lot area, is perhaps the most important well under way in the field at the present time because if commercial production is secured the intervening territory will be drilled up practically solid. The company is scheduled to make a test within the next two weeks and it is needless to say that the outcome will be watched with considerable interest, for it will either result in additional drilling or a cessation of work. The potentiality of this new well will not be known, of course, until conclusion of the projected test but, judging from the production of other wells and the dip of the structure, it appears quite possible that the San Martinez may bring in a 200 or 300-bbl. well. The company thinks enough of the showings found at 3,800 feet, however, to map six additional locations and while they will not be drilled until the present well is tested out, this tends to indicate that the company's geological staff is quite favorably impressed with the possibility of developing commercial production. Several other operators are also of the opinion that commercial production will be secured and as a result practically every favorable drilling site has been under lease for the past several weeks.

Drilling work in the town lot area is getting smaller and smaller with each succeeding week but it is quite probable that an appreciable increase will be noted if the San Martinez succeeds in proving up the area west of Ninth Street by finishing its present drilling project as a successful commercial producer. Operators are moving eastward rather slowly due to the uncertainty of securing favorable production and, while the present work at Seal Beach will undoubtedly be reflected in smaller drilling work at Huntington Beach, the latter district will not suffer if favorable production can be developed. The Standard is at present the largest single operator due principally to the amount of drilling being done on the Pacific Electric property where the company is running four strings of tools. The company is also drilling two new wells on the Huntington property and is running four or five strings on Lease B just north of the town lot area. The Ahlburg Gasoline Corp. still has five wells to finish in the town lot area before concluding its present drilling program. The company's latest completion was No. 5, a 200-bbl. pumper from 3,896 feet, the hole having been plugged back from 4,105 feet because of bottom water.

**Town Lot Completions**

There were several new wells and recompletions finished in the town lot section during the week but practically all of them were mediocre pumpers. The California Petroleum listed two new wells for completion, No. 3 fee and No. 1 Farwell. The former is pumping 110 bbls. of dirty oil from 4,364 feet, while the latter is pumping 98 bbls. daily from 3,840 feet, the hole having been plugged back from 4,387 feet because of bottom water. The Ambassador's No. 9 Huntington, a recompletion after being redrilled and deepened to 4,350 feet, was put on the beam during the early part of the week and returned to production pumping 245 bbls. of exceptionally clean 21.2 gravity oil daily. No. 1 Drew fee of the Petroleum Securities, another recompletion, was brought back pumping 120 bbls. of 21.6 gravity oil daily from 4,405 feet, the hole having been finished with a 4½-inch oil string. This well was originally brought in last November from 4,066 feet, at which time it registered an initial production of 785 bbls. The Transport Oil Co.'s No. 17 Huntington, the best well finished during the past week, was brought in flowing 345 bbls. daily from 4,425 feet, the oil testing 21.6 degrees and showing a cut of 2 per cent. The California Eastern's No. 1 Bogan made a preliminary flow a few days ago from 4,340 feet and, while it flowed at the rate of 400 bbls. a day for a few hours, it later sanded up and is now being cleaned out. The Superior Oil Co. has just filed a quit claim on the Methodist Camp Grounds and, while this property at one time looked as though it might warrant development subsequent drilling changed the outlook.

**Long Beach**

With the exception of some 8 or 10 wells being carried down to the deep zone, most of the work under way in the Long Beach Field at the present time consists of workovers and cleanout jobs. In view of this condition it is not surprising therefore that two of the three wells put on production during the past week were recompletions. These were the California Eastern's No. 6 Marine and No. 2-A Michaels of the Bartholomae Oil Syndicate. The former was brought in pumping 225 bbls. daily after being redrilled and deepened to 4,790 feet, while the latter is pumping 150 bbls. daily from 3,335 feet, the hole having been plugged back from 4,317 feet. The San Martinez Oil Co. finished a new well, No. 7 Booth, and while the output, 450 bbls. daily from 5,201 feet, is cutting approximately 30 per cent, it is believed that the production will eventually clean up to some extent. The National Gasoline Corp. has

just brought in No. 1 Clark in the shallow gas zone at 2,415 feet and it is doing a little better than 1,000,000 feet per day. The Miley-Mills interests are making preparations to drill a new well to be located 65 feet north of No. 4. This organization experienced considerable success during the early days of this field and the company's next spud, No. 6, will be located in close proximity to some of the best wells in the district.

The Fullerton Oil Co. is making preparations to abandon No. 1 Athens, a deep test in the Rosecrans Field, following an unsuccessful production test at 5,025 feet. E. L. Craigen's No. 1 Athens, which was likewise unproductive at 5,130 feet, will also be eligible for abandonment if the gas zone around the 2,000-foot level does not prove productive. Due to the limited amount of drilling being done in the Inglewood Field, completions in that area have become quite infrequent of late. There was one recompletion listed in that area during the week, however, the Shell having returned No. 4 Rindge to production pumping 120 bbls. from 2,673 feet. The Union listed a new well for completion in the Santa Fe Springs Field during the past week, one of the first finished in that area in some time. It was No. 27 Bell, completed at 3,472 feet, from which depth it is making 50 bbls. of oil and 1,500,000 feet of gas daily.

### Fullerton

The Shell has several potential producers in the Fullerton, or Brea Olinda Field, as it is generally known, not the least promising of which is No. 40 Stearns at 4,950 feet and No. 2-A Puente, which yielded an exceptionally favorable core at 4,605 feet. The Brea Canyon Oil Co. should also finish a new well or two in this area in the near future, as both Nos. 40 and 41 are making good footage. The Birch Oil Co. should bring in No. 13-A some time within the next 60 days and, judging by the present status of work, the Fullerton Oil Co. should finish its No. 22 along about the same time. The General Petroleum's next contribution at Fullerton will be No. 2 Tonner, which is at present drilling ahead in a favorable oil sand. The Union's work at Brea Olinda consists of two potential producers, No. 69 and No. 70, on the Stearns property and an outpost, No. 3 Olinda, which is at present rotating ahead in an extremely hard conglomerate at 2,345 feet.

### Richfield District

Two new wells and a recompletion were finished in the Richfield district during the current week, the Chiksan Oil Co.'s No. 1 A. & H. being the largest producer added. It was drilled to 4,687 feet and brought in flowing 365 bbls. of clean 23.3 gravity oil daily. Immediately upon completion of this well the company started rig construction for No. 2 and spud is scheduled for March 25. On the Bradford property No. 6 is standing cemented at 400 feet but the company will undoubtedly resume drilling within the next few days. The Standard's No. 23 on Kraemer Lease No. 2 at Richfield was given a test at 4,620 feet and the well is making 225 bbls. of 22.1 gravity oil daily. The company should add another new producer to its list in this area in the near future as preparations are now being made to finish No. 1 Moll Community at 3,150 feet.

The Continental has just finished its second deep-zone producer on the Pyne lease taken over from the Merchants Petroleum Corp. last year and this rejuvenated well, No. 2 Pyne, redrilled and deepened from the upper to the lower sand, is flowing a little better than 1,000 bbls. daily from 4,400 feet. No. 4 Pyne, now down 4,000 feet, should be recompleted during the early part of April and No. 5, a recent spud, now rotating ahead at 2,200 feet, should be tanking oil within the next 60 days. In checking over the operations of other operators it is quite evident that additional completions will be finished in this field from time to time during the next 60 to 90 days unless drilling work is abated as a result of an impending increase in production at other points. The Union, the largest operator in this field, has just concluded a preliminary test on No. 7 Thompson & Goodwin and, while the well is capable of making 125 bbls. daily, some additional work will be undertaken before it is listed as a final completion. This company, the California Petroleum and General Petroleum should all list new wells during the course of the next several weeks. The Holly Development Co., having acquired the Duval, Middleham, May, Wood and Barnett properties near the townsite of Carlton, has staked location for its first test and material will probably be on the ground within the next two weeks. Work in the Montebello Field has slowed up somewhat during the past few months, due to the attractive possibilities presented by other fields. The Standard and St. Helens Petroleum, however, are running three or four strings of tools in this area and the Union is putting in foundation for No. 29 La Merced.

### Ventura Avenue

Although there were no wells actually turned loose in the Ventura Avenue Field during the current week, there are three or four rapidly nearing completion, not the least important of which is the Bolsa Chica's No. 2 Hartman in the northern part of the field. This well is at present rotating ahead at 5,960 feet and it is the present intention of the management to bring it in somewhere around the 6,100-foot level. Substantial oil showings have characterized work during the past several hundred feet and the company is therefore assured of a fairly large flowing well. The company's No. 3 on this lease has just passed the 3,200-foot level while No. 1 Barnard a few hundred feet away is being prepared for an early spud. The Associated has several potential producers on the Lloyd lease, one of which in particular, No. 19, a real deep well at 6,670 feet, gives evidence of resulting in substantial production. No. 4 Hartman at 6,240 feet should also give a good account of itself.

The General Petroleum has several drillers on its development chart but it is hardly likely that any of them will be deep enough to make a bid for production within the next 30 days. The Shell has about six drillers which should come into production within the next 30 days, unless mechanical trouble develops or the rainy season slows up work. They are evenly distributed on the Edison, Casnell and Taylor leases. The Petroleum Securities has rigged up Nos. 2 and 3 on the Orton property and these wells will be spudded in immediately. It will be recalled that the Petroleum Securities finished its No. 1 Orton a few months ago and, while it is cutting approximately 40 per cent water, this is believed to be due to a defective water shutoff rather than to bottom water or edgewater encroachment. At any rate the company thinks enough of the deductions of its geological staff to drill two additional wells. The Shell is throwing up rigs for something like four or five offsets along the north line of the Petroleum Securities' Orton lease and drilling will no doubt be pushed ahead as rapidly as possible in order to protect its acreage against undue drainage.

### Midway-Sunset

Hugh B. Evans has just finished his No. 14 in Section 35-32-23 and it is making 230 bbls. of 16.2 gravity oil daily from 2,103 feet. This is one of the best producers finished in this area in more than two years and it is attracting considerable attention due to the large initial production recorded. The Gore Oil Co. recently concluded drilling on three more shallow wells in Section 21-31-22 and they are being put on the pump from the 1,000-foot level. The Standard is running six strings of tools in this district and apparently expected to substantially increase this number during the coming summer but with production on the up grade in southern California it is believed that the company will hold further work in abeyance. The company also anticipated additional development work along the Kern front offsetting George F. Getty's Tegeler and Lehnhardt properties but it is believed that this work


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will also be slowed down somewhat. The Shell has just completed No. 1 Vedder Rall in the Mount Poso Field and the well was shut in after a 12-hour production test because of inadequate pipe line facilities. It is being listed for completion as a 450-bbl. well from 1,883 feet. Development work is going along rather slowly at Goleta where E. J. Miley opened up a new field a few weeks ago due to the impassibility of the roads in that section. The Transcontinental, however, has already started road construction and a contract has been let to the Stone Drill Corp. for the first hole. E. J. Miley's No. 1 Goleta is holding up in good shape at 425 bbls. daily and the oil is being shipped out in tank cars daily. No. 1 at 2,930 feet is being pushed ahead in search of a deeper horizon, while No. 3 is scheduled to test out showings found down to 650 feet.

**Southern California Wildcats**

George W. Johnson's No. 1 Wickham, a wildcat near Castaic in Section 32-5-17, failed to result in commercial production on a recent test and, although the outlook was rather favorable, this 2,828-foot hole did not show anything more than a scum of oil. The hole was bailed down to 2,000 feet and 3-inch tubing was then run in to 2,800 feet. When placed on the beam the well pumped salt water with only a few colors. The Petroleum Securities spudded in No. 1 Weston, a new wildcat located in the Palos Verdes area, and 250 feet of hole has been made to date. Just previous to the spudding in of this test the company completed abandonment work on No. 1 Sesnon, a duster near Reseda in the San Fernando Valley. Drilling was concluded at 6,068 feet, the hole having failed to show a single favorable indication. The Van Nuys Community Oil Co. has filed an official abandonment notice on its San Fernando wildcat due primarily to an unsuccessful fishing job which developed at 3,860 feet.

The California Eastern's Potrero wildcat, No. 1 Smith, passed the 5,100 foot level during the early part of the week and, while there have been one or two favorable indications from time to time, no sands of sufficient thickness to warrant a production test have yet been encountered. There is still a remote possibility, however, of developing deep production. The General Petroleum's No. 1 Smith, north of the California Eastern's wildcat and due east of the Associated's original test which resulted in the influx of operators to this wildcat area, was reported down 4,150 feet a few days ago but up to the present time there have not been any major showings of importance. Most of the other operators who have erected rigs in this are are marking time, although one, George F. Getty, is dismantling his rig south of the Associated test and it will be moved over to Naples.

E. J. Robinson's No. 1 A. P. & K., a wildcat at San Juan Capistrano, approximately midway between Los Angeles and San Diego, was showing considerable gas during the early part of the week from 2,414 feet and, while there were no oil showings, the presence of gas let considerable encouragement to those interested in this test. Very little interest has been manifested in the area in and around San Juan Capistrano for the past several years as the Union pioneered that district and abandoned its wildcat just back of that city in what was reported to have been a granitic formation. The General Petroleum's No. 1 Lomita at Sunset Beach, located between the Huntington and Seal Beach Fields, is rapidly approaching the depth at which production should be secured, and hence this test will be watched very closely during the next two weeks.

**Northern California Wildcats**

The Pacific Eastern Production Co.'s wildcat at Bakersfield in Kern County, which was started some time ago by Hoyt S. Gale, California representative of the Gulf interests, has not yet found any favorable indications down to 3,650 feet but, notwithstanding the absence of these upper showings, the hole cannot yet be placed on the doubtful list. It is understood that the pay is anticipated around 4,500 feet. Other operators are continuing to line up protective holdings in this area as it is generally regarded as quite favorable. The Milham Exploration Co. is down 3,988 feet in its Buttonwillow wildcat and preparations are being made to drill another in this area. This would tend to indicate that the company is quite optimistic over the outlook and, since this area is generally classified as favorable for the accumulation of oil in commercial quantities, it would not be at all surprising if the company succeeded in opening up a new field at this point. Several dry holes have been drilled in this general vicinity in the past, although none of them was adjacent to the territory being prospected by the Milham. It will be recalled that the Milham's first test was lost as a result of a terrific gas blowout late last year. Several tracts near the Milham test have been leased during the past few months and, while it is reliably reported that the California Petroleum is contemplating the drilling of a wildcat here this could not be confirmed.

The Marland Oil Co., discoverer of the Seal Beach Field, cored a slight showing of oil in its Jacalitos Dome wildcat near Coalinga in Fresno County and the company will take several more cores in order to determine whether this is merely a little teaser or whether it overlies a well-defined oil zone. This section has been reported upon favorably on several occasions and, while it is generally supposed to require deep drilling it might prove shallower than some anticipate. Very little progress was made in wildcat operations in the Kettleman Hills area due to the recent rains which rendered the roads impassible. The General Petroleum is apparently fairly well sold on the possibilities of this area as it is understood that the company contemplates the drilling of another test in Section 26-22-18. The company's present wildcat in Section 30-23-19 has logged a few minor showings up to the present time but none of them of sufficient importance to warrant the expectation of securing commercial production. The Milham has just about finished rigging up for its new test to be located in Section 2-22-17, and drilling will probably get under way in the near future. This well is located about 2 miles north of the wildcat drilled by the General Petroleum a year or so ago. It will bear watching particularly in view of the fact that the General Petroleum encountered showings of both oil and gas before its test was abandoned because of mechanical trouble.

The Petroleum Securities is apparently intent on thoroughly testing out the possibilities of Monterey County, as another location has just been staked in that district. In addition to the company's present wildcat, which is down 1,710 feet in a granitic formation, there were two others recently abandoned in this county. The new test of the Petroleum Securities is located in Big Sandy Creek along the San Andreas Fault in Section 18-27-13. The Shell also intends extending its operations in this county and has accordingly acquired some leases in Section 12-20-6. This acreage will undoubtedly be tested out some time during the coming summer.

## MEXICAN FIELDS

(Continued from Page 50)

Co.'s No. 57 Toteco is salt water at 1,863 feet.

**Production Declining**

When the above reports are considered it is scarcely any wonder that the production curve shows a comparatively steady decrease. In January it went a little under 6,000,000 bbls. In February it was something less than January, although it might be considered that February is a "short month." At that, practically all production—certainly all production that is of any economic value—is coupled to transport to tidewater and is therefore available. Huasteca Petroleum Co. (Standard of Indiana), feel-

ing the pinch for the first time in its history for light crude, has commenced the exportation of such crude from Venezuela. Last month it received two cargoes from that country, where it has extensive holdings, aggregating 130,583 bbls. This oil is practically of the same gravity as its south fields Mexican crude. Huasteca uses its light crude to mix with its heavy northern Mexican fields (Ebano) production before refining it in its extensive refinery in Tampico. This is the first instance of any foreign crude being imported into Mexico, with the exception of crude from the United States, both coasts.

The rift in the cloud, so far as Mexican production is concerned, is the fact that the past 10 days has witnessed many new strings starting to make hole, this being especially true of the Huasteca's drilling department. In other words, it looks as if arguments with the Government are being adjustment. True, no new wildcats — the "cat" of the pronounced type—are yet announced, the new strings starting up in proven or near proven fields.

**Panuco-Cacalilao**

Field operations in the Panuco-Cacalilao sectors of the northern fields are best reflected as follows: Corona Petroleum Co.'s No. 82 San Manuel, in the Panuco sector, the "deep test" in which several are interested as a matter of geologic study, is at it again after a long shutdown. The drill is 3,975 feet in the Tamasopa limestone. In the Cacalilao, Lot 1, its Nos. 194 and 195 are each in shale at 1,105 and 540 feet respectively. Cia Pet. Francia, Mexico, No. 21, Lot 4 Tanchicuin, is in gray lime at 1,775 feet; its No. 24 Las Piedras is in shale at 500 feet. East Coast Oil Co.'s No. 234 Halcon cemented 8-inch at 1,310 feet in grey shale and shells. Cia. Pet. Chileno Mexicana, No. 42 Delicias is in grey lime at 1,300 feet. Mexican Sinclair Pet. Corp., is in the Cacalilao as follows: In Lot 2: No. 148, it is swabbing a head showing in grey lime at 1,825 feet; No. 149 cemented 10-inch in grey lime at 1,201 feet; No. 142 the same at 1,120 feet, same formation; No. 175 and No. 176 each cemented 8-inch in grey lime at 1,154 and 1,143 feet, respectively, and it is rigging up and moving in on two more locations in this lot. Its No. 150, Lot 3 is in grey lime at 1,490 feet. Mexican Petroleum Co.'s Nos. 35 and 40, Lot 1 Cacalilao are each drilling grey shale and 930 and 960 feet, respectively. New England Fuel Oil Co.'s No. 34 Pazzi is spudding. William Nienau Co., No. 7 W. Maguabes is testing for production at 2,050 feet in lime. Transcontinental Petroleum Co.'s No. 34-A Las Delicias is in grey shale at 516 feet; its No. 145 Lot 2 Cacalilao is running 10-inch at 650 feet in shale; its No. 68 Paciencia cemented 10-inch at 610 in shale. Vera Cruz Mexican Oil Co.'s No. 11 Buena Vista is fishing at 1,000 feet. Territorial Oil Co.'s No. 41 Salvasuchi is fishing for three joints of 8-inch casing, the hole being 900 feet.

**At Ebano**

The Ebano sector of the northern fields was the scene of the quick return to normal drilling conditions, with well after well starting and fast time being made. The record follows: Mexican Petroleum Co.'s (Standard of Indiana) No. 2 Ebano is in grey lime at 1,580 feet; No. 16 is in grey shale at 620 feet; No. 43 Midway is in grey shale at 730 feet; No. 58 is 69 feet; No. 60 is in grey lime at 1,440 feet; No. 70 is in grey shale at 730 feet; No. 25 Mendez is in grey lime at 1,520 feet; No. 26 is in grey lime at 1,420 feet; No. 27 is in grey shale at 210 feet; No. 105 La Dicha is in grey lime at 2,072 feet; No. 109 is in red and pink shale at 540 feet; No. 113 is in grey shale at 800 feet; No. 130 is in blue shale at 540 feet; No. 131 is in grey shale at 800 feet; No. 134 is in pink shale at 565 feet; No. 137 is in grey lime at 1,550 feet; No. 154 is in grey lime at 1,590 feet; No. 116 East Dicha is in grey lime at 1,375 feet; No. 125 and No. 137 are each in blue shale at 710 and 965 feet, respectively; No. 60 Chijoles is in grey shale at 910 feet; No. 69 is in grey shale at 405 feet; No. 71 is in blue shale at 910 feet; No. 15-A Pez is in blue shale at 850 feet; No. 20 is in grey shale at 690 feet; No. 24-A is in blue shale at 390 feet; No. 28 Pedro is in grey shale at 790 feet; No. 33 is in grey lime at 1,400 feet; No. 34 is in grey lime with a showing by heads, with the hole caving, at 1,400 feet; No. 123 Conteca is in blue shale and shells at 1,030 feet; No. 138 cemented 8-inch in grey lime at 1,422 feet. And, in the Caracol, just west of Tampico, Mexican Petroleum Co.'s No. 16-H is in grey lime at 1,902 feet; No. 18-H is in grey and brown lime at 2,375 feet, and its No. 58-V is in grey lime at 1,875 feet.

National Lines' No. 63 Conteca cemented 8-inch in grey clay at 1,506 feet.

**South Fields**

In the south fields operations follow: Agwi company's No. 33 Laguna de Tamiahua is in shale at 1,900 feet, and its No. 34 there is rigging. Huasteca Petroleum Co.'s No. 77 Tierra Blanca is rerigging to drill deeper at 1,915 feet, grey and brown lime; its No. 91 cemented 10-inch in brown shale at 1,674 feet; its No. 93 is shut down for orders at 1,626 feet in grey shale and shells, where it has been bailing; its No. 96 is in shale and shells at 2,129 feet, and its No. 7, Lot 163 Chinampa is in grey shale at 974 feet. Mexican Eagle Oil Co.'s No. 5 Chiconcillo cemented 6-inch at 2,150 feet in a shale.

**Northern Miscellany**

In the miscellaneous northern fields: American International Fuel Co.'s No. 49 Los Esteros is in white lime and chert at 3,135 feet, a deep test. Corona Petroleum Co.'s No. 22 Topila is in lime at 2,440 feet. Cia. Pet. Franco Espanola, (Marland) No. 87 Limon is in lime at 1,857 feet; No. 93 is in shale at 410 feet; No. 94 is in shale at 1,160 feet. Kern Mex Oil Fields, No. 3 Clarin is rigging. Mexican Gulf Oil Co.'s No. 59 Chapacao is in grey and grown lime at 1,675 feet; and in the El Barco it has permit to resume from 1,050 feet. National Lines' No. 66 Altamira is in grey lime at 1,380 feet, and its No. 97 Panuco is in grey and brown lime at 2,270 feet. The Texas Company's No. 1 Lomo del Pozo is in the Tamasopa with a showing of oil at 3,165 feet, and its No. 2 Zavala is in grey shale at 1,435 feet.

## CANADIAN FIELDS

(Continued from Page 63)

on a royalty basis by the Alberta-Flathead Oil Co. The Alberta Pacific Consolidated filings were largely in Township 1-17w4, a short distance west of the Imperial-Red Coulee well. The Red Coulee test, drilled in 1921 by Imperial Oil, Ltd., in Section 5-1-16w4, east of Coutts, was carried to a depth of 2,542 feet. An oil showing was encountered which failed to develop commercial production; and later, owing to water troubles, the test was abandoned. The Alberta-Flathead test will be drilled a little farther up on the same structure.

It is announced that British interests, headed by the Marquis of Anglesey, will drill this season on acreage in southern Alberta. J. F. B. Kitson is in Calgary in connection with the Anglesey interests. The Marquis of Anglesey, who visited southern Alberta and inspected several drilling locations last fall, will himself finance the test, though no specific location has yet been made. He holds acreage at a number of points in southern Alberta, and No. 1 test will probably be drilled in one of the border areas.

On the Mill Creek anticline, some 9 miles west of Pincher Creek, the Western Drilling Co. of Shelby, Mont., will start No. 1 test in LSD 4, Section 7-6-1w5, some time early in April. Preliminary work is reported under way now. The test is expected to get the Madison limestone at 2,000 feet. The Henry L. Doherty Co., which holds adjoining acreage, is reported arranging to drill at least one test this spring.

**Turner Valley**

In the Turner Valley Field, the Midwest Oil Co., originally a subsidiary of the old Southern Alberta Oil Co. and


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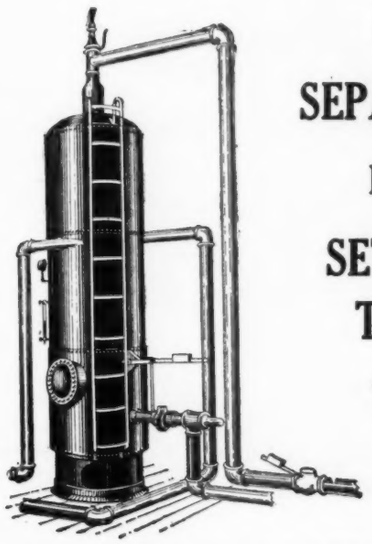

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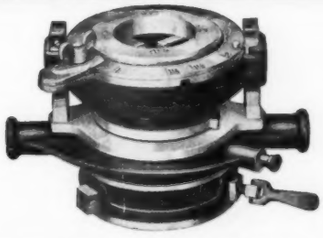

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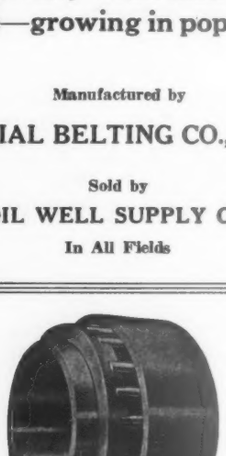

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now one of the Imperial Oil, Ltd., group, is planning a reorganization, preliminary to active development in the Turner Valley Field. At a recent meeting, the shareholders decided to form a new company with a suggested capital of $500,000, and to issue one share of the new stock for every four fully paid-up shares of the present Mid-West stock. The balance of the treasury stock will be offered to present shareholders at par on a share-for-share basis, any stock not thus taken up to be offered the public. It is expected that some new drilling will be undertaken by the Midwest as soon as the reorganization is completed.

It is announced that Imperial Oil, Ltd., will drill a test in the north end of the Turner Valley, close to the Stockman Oils, Ltd., test in LSD 1 and 2, Section 27-30-3w5. The new Imperial test, which will be known as Imperial-Millarville No. 1, is located in SW Section 26-20-3w5, and will, it is understood, be put down by the Northwest Co., the development subsidiary of Imperial Oil, Ltd. The location is on Hudson's Bay Co. land.

In the Turner Valley, Royalite Oil Co.'s No. 7, LSD 3, Section 13-20-3w5, offsetting Illinois-Alberta No. 1, is reported making rapid headway since changing to the rotary outfit, the drill at last reports being down 815 feet. The rotary is drilling 11½-inch hole, and less trouble is expected than at No. 5, where the outfit started with a 20-inch hole. Royalite No. 6, LSD 16, Section 31-19-2w5, has been cemented at 3,114 feet and is waiting for the cement to set.

Unofficial figures indicate that Royalite Oil Co.'s No. 4, naphtha producer, in February had a production of approximately 17,780 bbls. of crude naphtha, averaging 635 bbls. per day, compared with an average of 604 bbls. per day for January, when the production aggregated 18,737 bbls. Details of the new price-arrangement in the Turner Valley Field indicate that the four producing companies are signing 12 months' contracts with Imperial Oil, Ltd., for their output. Vulcan Oils, Ltd., Illinois-Alberta Oil & Refining Co. and McLeod Oil Co. will receive a gross price of $4 per barrel for the 72-degree Baume crude naphtha; with a pipe-line charge of 5 cents per barrel deducted, making the return $3.95 net per barrel at the well. New McDougall-Segur Oil Co. is to get $3 per barrel for the 55-gravity crude oil from the lower Dakota sand.

### Alberta Fields

Outside the Turner Valley, Imperial Oil, Ltd., is continuing work in the various fields throughout Alberta. In the Jumping Pound district, west of Calgary, Imperial-Bow River's No. 1, LSD 15, Section 12-25-5w5, is down 5,080 feet and has run 6¾-inch casing to a depth of 2,800 feet. Farther south in the Highwood district, Imperial Highwood No. 1 LSD 3, Section 36-18-3w5, has finished straightening a crooked hole and is again drilling at 1,962 feet. West of Nanton, Imperial-Rice Creek's No. 1, Section 4-14-2w5, shut down for the winter at 5,747 feet, is getting ready to resume drilling. In the border field east of Coutts, Imperial-Erickson Coulee's No. 1, LSD 13, Section 8-1-12w4, is at 3,470 feet and drilling. In the Ribstone-Blackfoot area, east central Alberta, Imperial-Ribstone's No. 1, Section 5-45-1w4, is still drilling in the lime at 2,580 feet. The drill entered the lime at 1,910 feet; at 2,060 feet the lime was somewhat broken, and at 2,162 feet and lower it was pure lime. At this depth the test is almost as deep in the limestone as the Imperial-Burdett was at 3,690 feet.

In the Turner Valley Field, Illinois-Alberta Oil & Refining Co.'s No. 1, LSD 14, Section 12-20-3w3, has gradually increased the back pressure to 1,200 pounds. At last reports, the wet gas flow had stopped altogether, after numerous fluctuations, indicating that freezing was taking place on top of the dolomite, due to rapid expansion. It is expected the well will gradually thaw out, with considerably increased production. Vulcan Oils' No. 1, LSD 11, Section 13-20-3w5, had a minor explosion recently as a result of an ice bridge forming at the bottom of the well; the accumulated ice shot over the top of the derrick, but the safety valves prevented any damage.

McLeod Oil Co.'s No. 2, LSD 16, Section 1-20-3w5, is at 3,940 feet and drilling in a decidedly hard formation with approximately 4,000,000 feet of wet gas. McLeod No. 3, same LSD, is drilling at 100 feet.

Dalhousie Oil Co.'s No. 1, LSD 4, Section 18-20-2w5, has resumed work with the diamond drill. In first drilling out the cement below the 3,500-foot level the stem of the diamond bit was twisted off, causing some delay while the broken portion was fished out and the damage made good. The drill is now in the cement at 3,525 feet. The hole was originally drilled to 3,600 feet with standard tools and filled back with cement to 3,400 feet after the 4½-inch casing had been pulled, on account of being too loose in the open hole to operate safely. After the bottom of the cement is reached, the drill will be carried to the top of the Madison lime before setting the string of small casing. Dalhousie Oil Co.'s No. 5, LSD 16, Section 30-19-2w5, is drilling in the lower part of the Kootenay formation at 3,525 feet and carrying 8¼-inch casing. The drill is making slow headway in a decidedly hard formation. Dalhousie No. 6, LSD 10, Section 13-20-3w5, has run 12½-inch casing to the bottom of the hole at 2,000 feet and resumed drilling. Some delay was caused by a bad joint, it being found necessary to pull the whole string.

### Temporary Decline

New McDougall-Segur Oil Co., LSD 14, Section 12-20-3w5, shows a drop in production to 70 bbls. a day, but it is thought this is a temporary condition. The well has been making 100 bbls. or better per day of 55 Baume crude. The company will finish No. 1 at this level and will drill No. 2 as close as possible to No. 1. Work on No. 2 will probably be started in April.

Home Oil Co.'s No. 1, LSD 10, Section 20-19-2w5, is at 3,475 feet and drilling in a very hard section of the calcareous shale. British Dominion Oil Corp., LSD 4, Section 5-20-2w5, is at 4,720 feet and drilling, with further small show of gas. Sentinel Oils, Section 8-20-2w5, is at 450 feet and drilling. Regent Oil Co.'s No. 1, offsetting McLeol Oil Co.'s No. 2, LSD 16, Section 1-20-3w5, has spudded in.

New Valley Oil Co., LSD 4, Section 6-21-2w5, shut down for the winter at 1,550 feet, will resume drilling about April 1. The casing is practically to the bottom of the hole.

Spooner Oils' No. 1, LSD 12, Section 13-20-3w5, is at 2,900 feet and pulling casing, the entire string having dropped in the hole owing to a faulty joint. As soon as the casing is reset, drilling will be resumed. Vulcan Oils' No. 2, LSD 11, Section 13-20-3w5, and Spooner Oils' No. 2, Section 24-20-3w5, have complete equipment on the ground, and Vulcan No. 2 is working on derrick.

Alert Oils, Ltd., of Calgary will drill No. 1 well on the W NE LSD 7, Section 31-19-2w5, close to the old Midwest No. 1. Cooper-Nanton Oil Co. of Calgary will do the drilling for the Alert on a turnkey contract; it is reported that work on the derrick is already under way, and the test is expected to spud in by April 15. A cable tool outfit will be used.

Details of the proposed reorganization of the Mid-West Oil Co. of Calgary show that the old company, organized in the latter days of the Calgary boom, had a capitalization of $1,000,000 with $1 par shares, of which 921,332 were issued. The company holds 160 acres in the Turner Valley, comprising LSD 8, Section 31-19-3w5; LSD 6, Section 31-19-3w5; N half LSD 13, Section 12-20-3w5, and 60 acres in Section 24-20-3w5. The two Midwest wells, started at the time of the Calgary boom, were both discontinued owing to casing troubles. Midwest No. 1, LSD 8, Section 31-19-2w5, is down 3,780 feet and Midwest No. 2, LSD 3, Section 24-20-3w5, is at 3,740 feet. It is claimed that both tests got fair showings of light crude at that depth. Later, the old Southern Alberta Oil Co. secured 550,000 shares of the Midwest stock, and this controlling interest was taken over by the Dalhousie Oil Co. when the latter

purchased the assets of the Southern Alberta group in 1925. The Dalhousie is an Imperial Oil, Ltd., subsidiary. The Midwest reorganization involves the formation of a new company capitalized at $500,000, with shares at $1 par. One new share will be issued for four shares of the old stock, while the remaining treasury stock amounting to $250,000 par will be sold for cash, present shareholders receiving a first opportunity to duplicate their holdings at par. The Dalhousie Oil Co. has undertaken to take up its proportion of this stock. The directors of the Midwest Oil Co. are: President, Alexander Hanna; vice presidents, J. H. McLeod and H. Mellville; secretary, A. Harris. The company, which has 2,700 shareholders, was formed in 1917 by the merger of the Northwest Pacific Oil Co. and the Western Pacific Oil Co.

Great West Oil Co. No. 1, SE, Section 7-20-2w5, is reported drilling at 5,475 feet. Okalta Oils, LSD 1, Section 1-20-3w5, is at 2,350 feet and drilling.

**Morley Reserve**

In the Morley Reserve area, Gold Coin Oils has finished underreaming and resumed drilling at 1,476 feet. J. H. Norman and associates who recently took over the unfinished test of Reserve Oils, Ltd., are preparing to resume drilling at 1,877 feet. The test has been shut down since last fall.

In the Moose Mountain Field, Signal Hill Oil Co. No. 2, LSD 9, Section 34-23-5w5, is at 750 feet and cementing 12½-inch casing at 675 feet. The drill is in a hard formation with slight traces of oil.

In the Irma-Wainwright Field, east central Alberta, it is reported that Wainwright-Dome No. 1, LSD 7, Section 31-45-6w4, which some time ago was shut down near the top of the oil sand, will discontinue work, and a standard outfit will be brought in for No. 2 test at another point on the Dome leases. In the Ribstone-Blackfoot area, further east, the Ribstone Petroleum Syndicate of Vancouver, B. C., has secured funds for three tests on the Ribstone structure. The syndicate, which holds 12,000 acres on the south end of the structure, will drill No. 1 in Section 14-43-3w4.

In the Border areas, the Doheny Oil Co. of California is reported to have secured acreage from the Michener Syndicate on the Blood Indian Reserve, the option covering 18,000 acres southeast of the Ainsworth Oils, Ltd., holdings in Township 7-22w4. Ainsworth Oils, Ltd., has 18,500 acres in the NE cor. of the reserve, in Townships 8-22w4, 8,23w4 and 9-24w4. H. L. Doherty & Co. of New York are reported to have approximately 13,500 acres on the west side of the reserve in Townships 7-23w4, 8,23w4, 7-24w4 and 8-24w4.

In the Pincher Creek district, the two tests to be drilled by the Western Drilling Co. of Shelby, Mont., are being put down for the Mount Royal Oil Co. of Calgary. The Canadian company is headed by W. M. Fulton and the Western Drilling Co. is understood to hold a controlling interest. Mount Royal No. 1, is in LSD 4, Section 7-6-1w5, and Mount Royal No. 2 in SE Section 15-6-1w5.

**Saskatchewan**

In the Province of Saskatchewan, Unity Valley Oil Co. No. 1, SE Section 23-41-24w3, will resume drilling about April 1, after being shut down for the winter. The test is in the limestone at 2,283 feet. The Unity Valley No. 1 was the first test in Saskatchewan to get commercial production of oil or gas, a showing of crude oil, estimated at 25 bbls. a day, being met at 1,130 feet, while deeper drilling encountered a gas flow, estimated at 10,000,000 feet per day, at 1,480 feet depth. In the Simpson area, the Simpson Oil Co. is overhauling and repairing its outfit at Simpson No. 1, Section 9-29-25w2, preparatory to resuming drilling. The rotary outfit will be used in the sand strata, the depth of which is about 150 feet; after this is cleaned out the heavy duty standard outfit will resume drilling. The Big Six Oil Co. of Saskatoon, Sask., which has been drilling in the Montana Field, is planning to drill a test this season at Kenaston, 45 miles south of Saskatoon. Big Six No. 1, NE, Section 29-35-1w, in Montana has been producing at 1,568 feet. It is planned to start No. 2 this spring in the Montana Field. The officers of the company are: President, J. G. Henry, Aberdeen, Sask.; vice president, G. A. Aldrich; secretary-treasurer and general manager, J. F. Blackstock; directors, Harry Hamilton, Fort Qu'Appelle; James Hamilton and S. Karst, Saskatoon; George Hemme, Garvin; J. J. Quinlan, Los Angeles, and W. M. Roberts, Zelandia, Sask.

In Manitoba it is announced by W. T. Ross, managing director of the Irro Gas & Oil Co. that the Hudson's Bay-Marland Oil Co. has taken over 1,320 acres of the Irro holdings in the Grandview section. The announcement was confirmed by S. R. Smith, Edmonton representative of the Hudson's Bay-Marland Oil Co. The Hudson's Bay-Marland Oil Co. will start reconnaissance work throughout the Canadian West early this spring, with a large staff of geologists headed by Glen M. Ruby, and it is reported that as a result of the oil showings at Grandview, especial attention will be paid to the structures in western Manitoba and eastern Saskatchewan. The Irro Gas & Oil Co. still retains a portion of its holdings, and will, it is understood, drill a series of six tests this season, in the Grandview area.

**Ontario**

In the Tilbury Field, Kent County, Ontario, Union Natural Gas Co. is reported finishing No. 263 test in Romney Township near Port Alma. Union No. 264, in the same area, is reported drilling below 600 feet. The Southern Ontario Gas Co. is drilling a test for gas offsetting Union No. 264.

In the Arkona district, Lambton County, the Clapp, Dinsmore & Hyatt interests of Windsor, Ont., are reported renewing their oil leases. These interests are associated with the High Pressure Oil & Gas Co., which drilled two deep tests at Rock Glenn, near Arkona. It is reported that the outfit from High Pressure No. 2, which has been drilled through the Trenton limestone, will be moved to a new location for No. 3 test.

A meeting of Ontario shallow oil producers was held at Petrolia recently when arrangements were made for making an application to the Dominion Tariff Board for some measure of protection to the Canadian producers, preferably through a re-establishment of the crude petroleum bounties discontinued a couple of years ago.

## SOUTHWEST WILDCATS

(Continued from Page 91)

1,947 feet is being put on the pump. Ray Oil Co. is moving in machinery for No. 1 Szalwinski, L. Manchaco Survey, 500 feet to northeast line and 200 feet to southeast lines.

**Kerr County**

Walker-Van Duyn's No. 1 W. B. Leigh, Survey 38, located 500 feet north of river and 150 feet south of railroad, is drilling at 1,930 feet in lime, with continuous showings of oil since 1,610 feet.

**Kinney County**

W. A. Stephens and others' No. 1 Jim Clamp, John Winters Survey 346, center of survey, is moving in machinery. Havelin Oil Co.'s No. 1, located 18 miles from Del Rio, at 4,280-90 feet is in black oil-soaked limestone mud, above brown silty shale, which when chloroformed gives strong cut of amber-colored oil. Tools are lost in the hole.

**Lavaca County**

Steinman Brothers' No. 2 Steinman (fee), 4 miles southeast of Yoakum, is drilling at 800 feet.

**Lee County**

Plunkett and others' No. 1 Adolph Wachemann, Thomas Kinney League, three-quarters of a mile west of Monheim, has resumed work and got back to bottom

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| 12:28 A.M. | 10:58 A.M. | Ar. | Midland | Lv. 6:15 A.M. | 6:56 P.M. |
| 1:00 A.M. | 11:33 A.M. | Ar. | Odessa | Lv. 5:40 A.M. | 6:20 P.M. |

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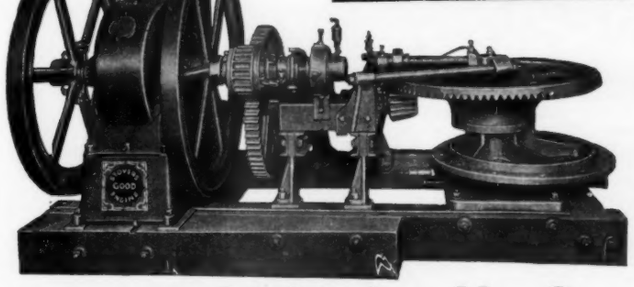

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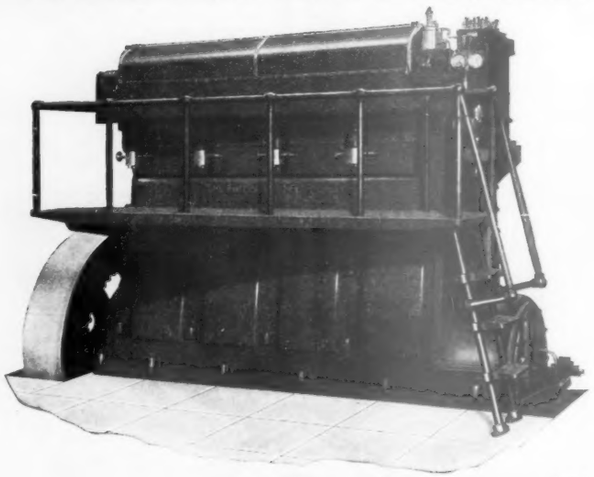

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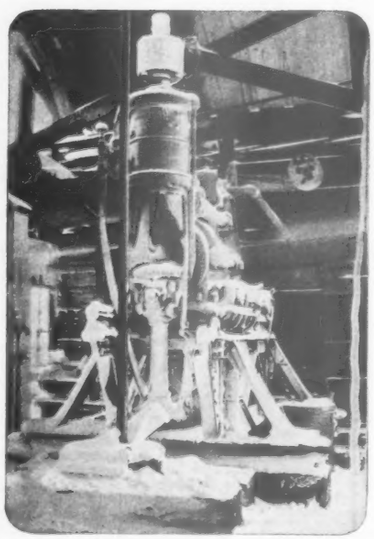

Shallow production has been common for 12 years in the Turner Valley Field, Alberta, Canada—but until recently it has never been possible to drill into the high pressure gas production below the cap rock, and successfully complete a well.

Terrific gas pressure and hard limestone made a double problem. Rigs that could stay in the hole couldn't cut the rock—and rigs that could cut the rock couldn't stay in the hole.

Three different wells were drilled into the pressure, estimated at 2500 lbs. to the inch—and in each case the tools were blown up in the hole and lost. Rapid expansion of the gas froze things up and handicapped fishing.

Until a few months ago not one well had been successfully completed—then the Illinois Alberta Oil Company solved the problem with a diamond drill. Boring down to a depth of 3500 feet with an ordinary rig, they reached the lime. To cut the hard lime and handle the gas pressure they substituted a "P-2" Sullivan Diamond Drill.

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of the hole, with the same showings had before the shutdown.

**Live Oak County**

Houston Oil Co.'s No. 1 Brown, completed at 2,035 feet, made 40,000,000 feet of gas. Houston Oil Co. has derrick up for No. 17 Cartwright, Cannon Survey, 1,500 feet southwest of No. 1 Riverbed; No. 1 Dunning, northwest of the present Cartwright Field, has set casing; No. 1 Sellers, J. McMullen Survey, 2,453 feet east of No. 2, is drilling at 1,550 feet. J. W. Walton's No. 1 Roberts, west of Three Rivers, is drilling at 1,680 feet.

**Medina County**

Yantis and others have made location for No. 1 Chandler, E. C. Durst Survey No. 13, located 2,150 feet to north line and 2,742 feet to east line, and has spudded in. Witherspoon Oil Co. is rigging up in Survey 92 for No. 2 Redus, and No. 1 Nixon in I. & G. N. Railway Survey No. 119, is also rigging up. R. P. O'Brien has taken over No. 1 J. P. Nixon of L. Smith, abandoned last June and is drilling at 60 feet, with location in SE cor. of Survey 531. F. L. Williams' No. 1 John Fohn, Survey 115, east 100 acres, located 300 feet to south line and 175 feet to east line, is drilling at 260 feet. J. H. Gray and others' No. 1 Louis Mann, R. B. Durst Survey No. 16, located in SE cor., is showing oil at 1,036 feet. Ina Oil Co. has spudded in No. 2 Finger, Survey 746, located 300 feet south of No. 1. Cecil Switzer's No. 1 Zerr, Survey 459, west central part, has set 6⅝-inch casing at 2,690 feet. J. S. Wheless-E. T. Peters' No. 1 Anton Berger, William Teel Survey 341, located 507 varas to south line of survey, is drilling at 500 feet.

**Maverick County**

Ryan Consolidated Petroleum Co.'s No. 1 Indio ranch, Survey 14, 18 miles from Eagle Pass, has spudded in. Rycade Oil Co.'s No. 1 Chittim, 18 miles from Eagle Pass, has hole clean after nearly three months' fishing job, and work has resumed; No. 2 Sullivan is drilling at 3,400 feet.

**McMullen County**

George Pickett has derrick up on the Jacobs lease, north of the Callihan Field.

**Nueces County**

Pearson and others' No. 1 John Dunn, south side of Nueces Bay, is drilling at 1,900 feet.

**San Patricio County**

F. S. Smiley's No. 1 T. E. Wilson, several miles south of Odem, one-fourth mile northwest of Angelita, is rigging up. W. L. Pearson and others' No. 4 Cage, Rachal Survey, 1,200 feet north of No. 2, is on a sand at 2,400 feet and is setting casing; No. 5 Cage at 2,400 feet blew out while setting casing, and casing stuck 300 feet off bottom and 4½-inch liner is now being set. Huber-Crawford's No. 1 Huber-Crawford, Block 17, N. Delgavo Survey, 300 feet to northwest line and 2,500 feet to southwest lines, is drilling at 1,400 feet. J. T. Laprade-Early Deane are blocking acreage for a test.

**Sutton County**

National Potash Co. of America has spudded in No. 1 Ross with diamond core drill.

**Wilson County**

Thomas and others' No. 1 Aug. Haese, Survey 124, located 300 feet to NE cor., are rebuilding derrick, with total depth 780 feet.

## ARTESIA, N. MEXICO

(Continued from Page 59)

in the Grace Mitchell, The Texas Company has dismantled its rig on the Johnson permit in the SE SE, Section 34-16-31 and has moved it to the NE SW, Section 25-16-31 on the Lucy Robinson permit. This location is a mile ant a half northeast of the abandoned location and slightly west of an arm that extends off the caprock at the Taylor ranch. This location will put The Texas Company's well in a northwest, southeast line with the Grace Mitchell and No. 1 Baish producers.

The Prairie Oil & Gas Co. plugged its No. 1 Keel in Section 10-17-31 at a depth of 3,827 feet. It is the intention to pull the 6-inch and shoot the hole from 3,359 feet to 3,411 and from 3,483 to 3,581 feet. The well will probably make a nice producer following the shot, as the oil encountered came from a brown sandy lime, similar to that found in a number of the producers in the Artesia Field.

Henderson, Dexter, Blair, Inc., this week resumed drilling of their No. 1 Wyatt in the SW SW, Section 34-17-33 at a depth of 4,503 feet. The hole will be carried an additional 800 feet.

**West Side of Artesia**

On the west side of the Artesia Field, the Empire Gas & Fuel Co. has completed another good shallow producer in No. 2-A Russell in Section 35-17-27, this production coming from a sand encountered from 1,614 to 1,637 feet and is making 30 bbls. daily.

A. D. Morton of Bartlesville, Okla. is reported to have made a location in the SW NW, Section 28-11-38, close to the Texas state line.

Due to the latest cut in the price of crude, which came March 12, bringing Artesia oil to the low price of $1 per barrel, a number of the producers have decided to store as much oil as possible.

**Eddy County Drilling**

Clark & Grimm's No. 1 Daugherty, NE SW, Section 3-17-27, underreaming at 850 feet; Compton's No. 3 Mann permit, SE, Section 3-18-27, shut down at 400 feet; Compton's No. 2 state, NW, Section 2-18-27, drilling at 950 feet; Empire Gas & Fuel Co.'s No. 2-A Russell, SW SE, Section 34-17-27, cleaning out after shot; Empire Gas & Fuel Co.'s No. 1-B Russell, SE NE, Section 34-17-27, drilling; Hamilton Petroleum Co.'s No. 1 Billings, Section 12-19-26, shut down; Hammond Oil Co.'s No. 1, NW SE SW, Section 15-16-25, drilling below 900 feet; Kelly's No. 1 Berry permit, NW NW, Section 27-17-27, drilling below 400 feet; Lackawanna Oil & Refining Co.'s No. 1, NE SE, Section 17-16-27, drilling below 1,550 feet; Lackawanna Oil & Refining Co.'s No. 7. C NW SE, Section 21-18-28, drilling below 1,200 feet; Marland Oil Co.'s No. 1 Hale, Section 11-20-30 drilling at 600 feet; Manhattan Oil Co.'s No. 1 Cronin permit, SE NE, Section 1-18-27, drilling; Midwest Refining Co.'s No. 1 Terry, SW NW, Section 5-18-26, drilling; Ohio Oil Co.'s No. 1 Marland, SW SW, Section 13-22-29, cementing pipe; Prairie Oil & Gas Co.'s No. 1 Keel, SE SE, Section 10-17-31, plugging back to shoot upper sands; Picher Oil Co.'s No. 4, NW cor. SE SE, Section 12-18-27, location; W. A. Stone Oil Co.'s No. 1 Hunlik, SW NW NW, Section 25-17-26, drilling below 400 feet; Skelly Oil Co.'s No. 1 Lynch, Section 22-17-31, capped; Texas Production Co.'s No. 1, NE SW, Section 25-16-31, location; Woolley & Jones' No. 1 McIntyre, C SE, Section 21-17-30, drilling below 3,287 feet.

**Chaves County**

Arena Oil Co.'s No. 1, SE, Section 24-12-30, location; Gibson Oil Corp.'s No. 1 Forsyth, C NE, Section 8-11-23, shut down at 675 feet; Sparrow & Drake's No. 1 Fahrlander, Section 11-6-27, temporarily shut down at 650 feet; The Texas Company's No. 1 Dunken Dome, SW, Section 29-17-18 drilling at 3,200 feet.

**Lea County**

Cap Rock Oil & Gas Co.'s No. 1 SE, Section 11-16-32, shutting off water at 750 feet; Covert's No. 1, NE NE, Section 15-21-33, underreaming at 1,860 feet; Exploration Co.'s No. 1, NE, Section 25-19-35, drilling below 1,350 feet; Henderson, Dexter & Blair's No. 1, Wyatt, SW SW, Section 34-17-33, resumed drilling at 4,503 feet; Inglefield & Bridges' No. 1, Section 4-17-34, 2,000 feet oil in hole at 4,725 feet; Maljamar Oil & Gas Corp.'s No. 1 Beardsley, SW SW, Section 15-17-32, spudding; Grace Mitchell's No. 1, SW cor., Section 5-17-32, cleaning out after shot; Ohio Oil Co.'s No. 1 Wm. Mitchell, NE cor. SW, Section 18-17-32, drilling at 4,260 feet; Texas Production Co.'s No. 1 Jackson, SE cor., Section 4-20-34, ready to spud; Texas Production Co.'s No. 1 Rhodes, NW, Section 22-26-37, rigging up.

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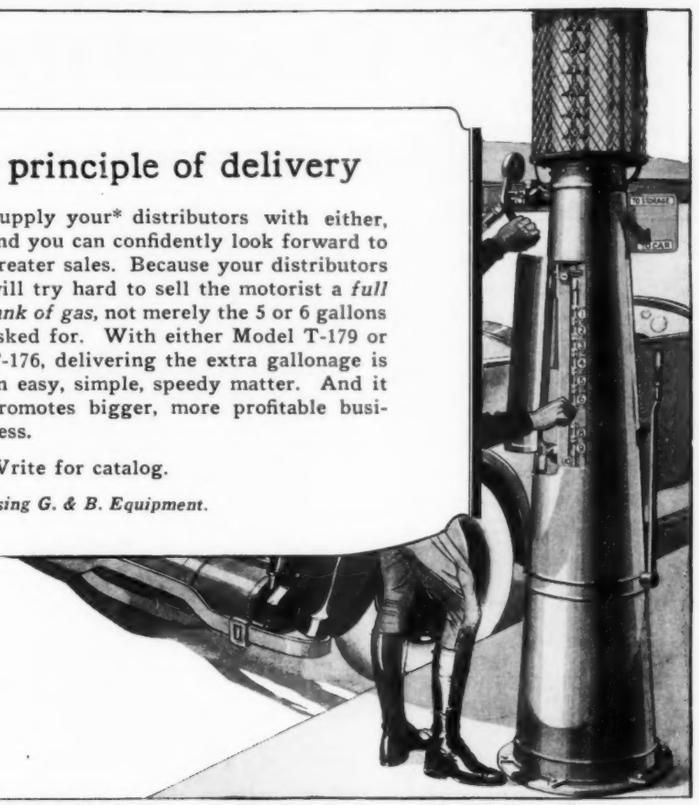

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*—yet occupies a minimum of space*

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The unusual high efficiency of this type filter makes possible a greater filtering capacity with a compactness permitting economy of space over filters of other makes that do not begin to compare with Burt operation.

Each Burt unit is so designed that it can be used in connection with or independent of an oiling system. Any number of additional units may be added as requirements increase. Write for complete catalog.

**The Burt Manufacturing Company**
**929 S. High St., Akron, Ohio**
*Pioneer Oil Filter Manufacturers*

## H&W ROTARY SLIPS with Renewable Liners

*Can't possibly crush pipe because extra long bodies insure firm seating between rotary table and the pipe.*

Economy of time, labor and money are paramount qualities of the H. & W. Rotary Slips with Renewable Liners. Time waste and trouble are banished, because, when worn, it is only necessary to replace the liners, not the complete slip. This is easily and quickly accomplished by removing two cap screws. The long handle provides quick and easy handling. Unexcelled for convenience and speed.

*Two sizes fit all pipe from 6-in. down; 6-in. body for 6-in. and 5-in. pipe; 4-in. body for 4-in., 3-in., 2½-in. and 2-in. pipe. Also made in casing sizes. Always in stock for immediate delivery.*

B-R Real Service 24 Hours every day

BAASH-ROSS TOOL COMPANY
3513 BOYLE AVENUE PHONE DELAWARE 2141
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BRANCHES
Long Beach—Brea—Ventura—Taft—Rosecrans
P. O. Box 694, Houston, Texas

**35 CENTS** a line first insertion; 25c a line each additional insertion. Cash in advance.

# CLASSIFIED WANTS

CREATE AND BUILD BUSINESS

**MAIL** your advertisement now. It will be published next week. Cash with order.

## FOR SALE—EQUIPMENT

AIR COMPRESSORS

AT BARGAIN PRICES

1—498-ft. Ingersoll, straight line, steam driven.
1—558-ft. Sullivan, two-stage, steam driven.
1—790-ft. Laidlaw, two-stage, steam driven.
1—888-ft. Ingersoll Rand, two-stage, steam driven.
1—1,188-ft. Laidlaw two-stage, steam driven.
1—1,190-ft. Ingersoll Rand, two-stage, steam driven.
1—1,575-ft. Laidlaw, two-stage, steam driven.
1—790-ft. Laidlaw, two-stage, belt driven.
1—1,094-ft. Sullivan, two-stage, belt driven.

MACHINERY & SUPPLY CORP.
Dept. 35
Joplin, Mo.

**FOR SALE** — Uncrated Worthington Turbine pump, 4,500 gallons per minute, double 10 in. suction, for direct or belt connection, high efficiency, 120 head. $800. Jamot Brown, Florence, Colo.

SECOND-HAND PIPE BARGAINS—50,000 feet 2-inch, 8c; 50,000 feet 2½-inch, 9c. Other sizes at proportionate prices. All pipe has first-class threads and couplings. Texas Supply Co., Lorraine and Semmes Sts., Houston, Tex.

FOR SALE

Five Deane Triplex pumps, 5x8.
One No. 5, 1 No. 9, 1 No. 11 Sweetland oil filters.
Two 10-inch S. Roturbo centrifugal pumps.
Six 10-inch S centrifugal pumps, steam turbine.
Storage tanks, various sizes. Send for list.

Send us your inquiries for items not listed. We buy your idle equipment.
Wire, phone or write
CONSOLIDATED PRODUCTS CO.,
15 Park Row, New York City.
Barclay 0603.

10,000-BARREL riveted steel tank at LeLoup, Kans. Johnson & Wickard, Garnett, Kans.

FOR SALE—Casing Pulling Machine complete with lines, block and tools. Pulls on gears with tractor power. In good working condition. Sell at sacrifice if taken at once. Write H. T. Bodkin, Box 865, Cushing, Okla.

FOR SALE

Material purchased for foreign exploration new and in original packages made by the Oil Well Supply, National and Hughes Companies, consisting of Jars, Bits, Combination Pumps, etc. Suitable for Texas, California, Oklahoma and Wyoming. List will be sent on request. Bargain prices for quick sale. Apply
BOX B-761
The Oil and Gas Journal,
Tulsa, Okla.

USED LINE PIPE AND CASING FOR SALE

7—25-h.p. used gas engines.
10—6-in. standard rigs.

15,000 ft. 5⅜-in. used casing.
15,000 ft. 6⅝-in. used casing.
10,000 ft. 8¼-in. used casing.
5,000 ft. 10-in. used casing.

75,000 ft. 3-in. used line pipe.
50,000 ft. 4-in. used line pipe.
20,000 ft. 6-in. used line pipe.
For immediate shipment from our Texas yards.
KEYSTONE PIPE & SUPPLY CO.
607 Holmes Bldg.,
Fort Worth, Tex.

## FOR SALE—EQUIPMENT

TANK CARS FOR RENT OR FOR SALE

Twenty-five all-steel, 8,000-gallon capacity with heater coils and safetly valves; built in March, 1915, by the American Car & Foundry Co., and now actively giving satisfactory service. For rent until October 1, or for sale. Write P. O. Box 570, New Orleans, La.

STANDARD RIG FOR SALE

New 120-foot standard rig, complete; has just drilled one well; good 6-inch Marion rig irons; set Marion iron bull wheels; set Lucy calf wheels; 65 H. P. Lucy boiler; new style Ajax engine complete; O. W. S. engine; two 250-bbl. steel tanks; underreamers; elevators, gas burners; belts; casing line; crown block; casing clamps and considerable other drilling equipment; all in first-class condition; practically as good as new and offered at a great discount. Write R. S. Randerson or H. L. Berry, 318 Braniff Building, Oklahoma City, Okla. Telephone Maple 0778.

## EQUIPMENT WANTED

WANTED—A Star drilling rig; must be in good condition. G. W. Shobert, Cherryvale, Kans.

WIRE ROPE WANTED

Rejected new and used wire lines, ½, ⅝, ⅝, ¾, ⅞ and 1-in., all 6 by 19; state exact condition, number reels each size, approximate lengths of reels, price per gross ton on cars shipping points. Lock Box 57, Easton, Pa.

## MANUFACTURING MACHINISTS

MACHINE WORK — Foundry products; let us figure on the manufacture of your equipment. First-class service. Reasonable prices. Prompt deliveries. Large establishment.
GENERAL ENGINEERING & MFG. CO.
St. Louis, Mo.

CRAGO CUT GEARS

Worthy of your confidence. General machine work. 1416 Walnut, Kansas City, Mo. Phone Harrison 7660.

## BUSINESS OPPORTUNITY

FOR SALE—Four lots in Fort Stockton, Tex., at $75 each. J. Schelder, 16½ So. Main, Mansfield, Ohio.

OIL WELL CEMENTING DEVICE

I have what you have been wanting in a new device for cementing oil wells of all classes for rotary and dry hole method for standard tools, something new and 100 per cent efficient and very simple. No infringement on any other method now in use. Would be glad to consider a reliable, high-class man or firm to cooperate with me in the development of this device for placing on the market at once. Box B-771, The Oil and Gas Journal, Tulsa, Okla.

WANTED—Specialties to sell or manufacture for drilling operations in Mid-Continent Field, by company already successfully marketing such products. Address Box B-772, The Oil and Gas Journal, Tulsa, Okla.

INVENTIONS WANTED on oil field and pipe line equipment by Fort Worth concern equipped to manufacture, sell and finance. Must be patented or patentable and developed ready for marketing. Box B-764, The Oil and Gas Journal, Tulsa, Okla.

U. S. PATENT FOR SALE—Covers simple device for draining tubing before pulling. Time and money saver. Can be manufactured to sell cheap. Patent priced to sell. W. L. Dickens, 101 Marietta St., Atlanta, Ga.

ARE YOU satisfied with results from St. Louis & Southwest Districts, in Oil & Industrial Fields? Exclusive sales rights desired of a reputable company or corporation. Will devote all time. Address Box B-769, The Oil and Gas Journal, Tulsa, Okla.

## BUSINESS OPPORTUNITY

FINANCE your project with stock bonded. Quickest and most satisfactory known method of raising capital. Information free. Bankers Interstate Security, Electric Bldg., Denver, Colo.

OIL, MINING or industrial companies who desire to sell block of stock for legitimate development or purchase of property, write us your particulars. Pre-organization financing before incorporating our specialty. Clean methods, moderate commissions. National Business Corp., 301 Foster Bldg., Denver, Colo.

FOR Complimentary copy of "The Promoters' Handbook" a leaflet on financing, write to Amster Leonard, 617 Central Ave., East Orange, N. J.

OWN TWENTY thousand acres in Eastern Hudspeth County, Texas, classified dry grazing, according to U. S. G. S. all in Pennsylvania Lime. Offering eight thousand of this—your choice without bonus—for well thirty-five hundred feet deep. Speculators please save stamps. W. B. Melton, Allamore, Texas.

WANTED—Supplyhouses and Jobbers to sell on commission basis, the Automatic Water Control for steam boilers. L. S. Water Control Co., Box 294, Norphlet, Ark.

FOR SALE

Have lease contracts on 4,000 acres, Joplin, Picher, Lead & Zinc District. Low Royalty. No Money required except for development. Will assign all or any part on liberal development requirements.
B. M. & S. MINING CO.,
Box 365, Columbus, Kan.

ORGANIZATION with years of experience is prepared to supply capital for worthy project; commission basis; corporations and mergers formed; prospectuses prepared. Safety Finance Service Co., 11 Broadway, New York.

## WANTED

SOMEONE to promote or develop an oil tract in McDonough County, Illinois, of 240 acres; 505 feet to oil sand and 50 rods from oil well. N. W. Wear, 510 Bellingham National Bank Bldg., Bellingham, Wash.

WANTED from owner, good producing property with sufficient proven acreage for further development. A. B. Head, 418 West Bldg., Houston, Tex.

WANT drilling blocks and leases in Pecos, Terrell and Crockett at reasonable prices. Chas. E. Parrott & Co., Amarillo Hotel Lobby, Amarillo, Texas.

WANTED—WET GAS CONTRACTS

Gasoline producer will give interest in plant or overriding royalty. Give volume and gasoline content. Wm. H. Allen, contract dept., 1215 Detwiler Bldg., Los Angeles, Calif.

WANT producing royalties if priced right. Richard Hill, 813 E. Haskell, Tulsa.

WANTED—Financial help to drill very promising oil structure. Box B-720, The Oil and Gas Journal, Tulsa, Okla.

WANTED—Oil Lease Purchase Association, Inc., 227 U. S. National Bank Bldg., Denver, Colo., buys 40 and 80-acre leases, offsetting or not to exceed one-half mile from drilling well or wells guaranteed to be drilled. Also producing royalties.

## MAILING LISTS

OIL COUNTRY mailing lists; all kinds; guaranteed. Oil Industry Register. P. O. Box 3103, Tulsa, Okla.

## HOTELS

TEXAN HOTEL, Pampa, Tex. Heart of Panhandle Oil Field. Family style, home-cooked meals.

## ACCOUNTANTS AND AUDITORS

Established 1910
H. V. ROBERTSON & CO.
(H. V. Robertson, C. P. A.)
Accountants and Auditors
Income and Estate Tax Service
705-6-7 Amarillo Bldg.,
Amarillo, Texas.

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Before disclosing your invention to anyone, send for blank form,
Evidence of Conception
Bulletin "How to Establish Your Rights" and complete information free.
LANCASTER & ALLWINE
240 Ouray Bldg., Washington, D. C.

PATENT-SENSE — Valuable book (free) for inventors seeking largest deserved profits. References include prominent oil men. Lacey & Lacey, 718 F St., Washington, D. C. Established 1869.

## INCORPORATIONS

CHARTERS — Deleware best, quickest, cheapest, most liberal. Free forms. Colonial Charter Co., Wilmington, Del.

DELAWARE incorporators. Charters fees small, forms. Charles G. Guyer, 901 Orange St., Wilmington, Del.

## HELP WANTED

AMERICAN ENGINEERS Service, Pittsburgh, Pa. Requires for employment proposals. Graduate Mechanical Engineers; Steam and Chemical maintenance engineers; Designing Draftsmen; Piping; Structures; Power equipment; Chemist; Testers; Accountants; Civil Engineers and Oil Geologists. Free telegraph service to employers, everywhere.

## POSITION WANTED

POSITION WANTED—New connection wanted by highly trained geologist with 14 years experience in oil geology. Straight salary and expenses or expenses and part salary and interest. Can also manage land department and buying of leases or royalties. Write Box B-765, The Oil and Gas Journal, Tulsa, Okla.

SUPERINTENDENT of Production or tools. Change desired April 1. 25 years experience. Good references. Box B-768, The Oil and Gas Journal, Tulsa, Okla.

MEMBER American Society Mechanical Engineers seeks position with oil company. Eleven years pipe line superintendent and chief engineer respectively, of large corporation, employed abroad. Design, operation of oil transportation systems, experienced in all classes of construction work. Can furnish the highest references as to character, capacity for organizing and executive ability. Box B-767, The Oil and Gas Journal, Tulsa, Okla.

PRODUCTION Supt. desires new connection, 12 years with major company, thorough knowledge of methods to increase production. Box B-766, The Oil and Gas Journal, Tulsa, Okla.

POSITION WANTED — Experienced office and supply man. Desires connection with oil or supply company. Age 26, married, references. Box B-763, The Oil and Gas Journal, Tulsa, Okla.

TECHNICAL school graduate, American, Married, 36 yrs. old. Eleven years practical experience surveying, maping, running titles, drafting, construction plant & townsite layouts, cost accounting and estimating. 5 years with natural gas including carbon black and gasoline. Desires to make change. Box B-762, The Oil and Gas Journal, Tulsa, Okla.

FIRST-CLASS production man wants position as lease foreman; 12 years' experience. Can go anywhere; best of references furnished. Box B-750, The Oil and Gas Journal, Tulsa, Okla.

AVAILABLE upon giving suitable notice, desires a change, married, 30 years' experience in office, plant and field. Natural gas distribution, no matter how many consumers. Will make friends of all. Address Box B-723, The Oil and Gas Journal, Tulsa, Okla.

PRACTICAL Gas Engineer, having ten years experience in natural gas production, desires a position as superintendent. Familiar with geology, appraisal's, drilling, compressing and transporting, also pipe line design and construction. Now employed. Want opportunity with future depending on ability and results. Married Age 33, Box B-745, The Oil and Gas Journal, Tulsa, Okla.

**35 CENTS** a line first insertion; 25c a line each additional insertion. Cash in advance.

# CLASSIFIED WANTS

CREATE AND BUILD BUSINESS

**MAIL** your advertisement now. It will be published next week. Cash with order.

### POSITION WANTED

YOUNG MAN with liberal education, experience in auditing and tax work, five years with producing company in Mid-Continent Field, desires permanent connection with growing company or individual producer. Opportunity for advancement is first consideration, salary secondary. Box B-770, The Oil and Gas Journal, Tulsa, Okla.

POSITION WANTED by Field Superintendent with 27 years experience with cable and rotary tools. Age 41. Employed at present but desires a change. Box B-742, The Oil and Gas Journal, Tulsa, Okla.

CHEMICAL engineer and refinery superintendent with over 22 years' experience in European and American crude oils, specialist in lub oils and high vacuum distillation, desires change. Best references. Box B-736, The Oil and Gas Journal, Tulsa, Okla.

CHIEF Production Accountant, co-operating lessee and lessor, desires position. Economical reorganization. Royalty payments, reports, and records that satisfy. Henry O'Connor, 815 Sixth Street, Alexandria, La.

### ROYALTIES—PRODUCTION

ROYALTY FOR SALE—I have a few units royalty for sale on the southeast quarter of 24-23-4 in Garfield County, ½ mile west of the big Marland-Garber well. Address L. L. Thorp, Anthony, Kans.

FOR SALE—Part of royalties on 71½ acres, northwestern part Fayette County. A. Baker League. Write A. H. Becker, Jr., Route No. 2, Box 65, Carmine, Tex.

ROYALTIES WANTED—Producing-offset and under drilling wells; also producing properties and leases. J. Ben Brown, 115 North Vancouver St., Tulsa.

CASTRO COUNTY, TEXAS

Oil royalties and leases in and adjoining Gulf block now drilling.

J. W. ALLEN
8, Enfield Austin, Texas.

CULBERSON COUNTY, TEXAS—I own 16,000 acres in one body in Culberson County Texas. Will sell mineral rights on entire tract reserving eighth royalty, at $1.50 per acre. C. H. Leavell, Box 1223, El Paso, Tex.

RATLIFF & CO.
Oil leases and royalties. 630 and 631 Security Bldg. Phone W. 7881, Oklahoma City, Okla.

POTTAWATOMIE County Royalties, large or small interests. B. H. Rowlett & Co., Tecumseh, Okla.

### LEASES—PRODUCTION

LEASES Royalties and production. Earlsboro and Seminole Fields. C. E. Deaton, 3rd floor Mammoth Bldg., Shawnee, Okla.

OIL LEASES Castro County, Texas. For Sale for cash only subject being unsold.
40 Acres of S.W. Quarter Section 39 Block 10T—$5.00 per acre.
80 Acres of N.W. Quarter Section 184 Block M 6—$3.00 per acre.
80 Acres of N.E. Quarter Section 177 Block M 6—$3.00 per acre.
80 Acres of N.E. Quarter Section 13 Block 10T—$3.00 per acre.
20 Acres of So. portion Section 49 Block K13—$4.00 per acre.
Frank Hassel, Box 822, Plainview, Tex.

LEASES, drilling blocks, royalties. West Texas for sale. Green & Hines, Box 1303, Abilene, Tex.

DRILLING blocks bought and sold. Chaffee & Co., 500 Equity Bldg., Oklahoma City, Okla.

EASTERN NEW MEXICO
10 yr. Oil & Gas Leases, low rental.
Cheap land & Royalties

FOR LEASE—10 acres Pottawatomie County, Section 18-7-5. Write Mrs. Genin, 416 Elmwood Ave., Elmwood Place, Ohio.

### LEASES—PRODUCTION

60- ACRE Oil & Gas lease, SE¼-NE¼; & S½-NE¼-NE¼; Sec. 20, Twp. 4 N., R. 6E. Pontotoc County; less than two miles to Dixie deep test in Sec. 10-4-6. Lease to run nearly 10 years; $25.00 per acre. O. L. Parker, Box 406, Ada, Okla.

OIL LANDS
FOR CORPORATIONS
OR
INDIVIDUAL INVESTORS
Texas acreage in large or small blocks close to activity of major companies. These tracts, located on Marathon Fold are bargains, bought right and will be sold right. State your wants and secure protection while possible. Address—Owner, S. H. Jaques, 29 Janet Road, Wollaston, Massachusetts.

A PRODUCER of Pa. and Ky. oil (can give good references) desires to sell ½ working interest in 1 to 12 tests located near production or on good structure. Cost of tests at less than ½ of $2,000. Will only answer parties with good references. Ernest Porter, East Brady, Pa., or Monticello, Ky.

FOR SALE—Oil & gas lease or drilling contract on 450 acres in Sec. 1, T. 3N, R. 5W, in Grady County, Okla. Make me an offer. J. Mazur, 1831 Evergreen Ave., Chicago, Ill.

FOR SALE—845 acre lease, east of famous Fry Pool, Brown County, Tex. Big bargain for parties who mean business. Address No. 307 Hodges Street, Ranger, Texas.

$100

BUYS 40 ACRE LEASE

In Texas Panhandle Near

Five Drilling Wells

Ask For Map Showing Location

J. W. PIGMAN, Owner
DALHART, TEX.

I OWN 80 acres in fee near Benton, Butler County, Kansas. Will lease. One mile North from production. Address John S. McKibbin, 3613 Cleveland Ave., Kansas City, Mo.

6,800 ACRES South-West Texas. Shallow production on land. Five or ten year paid up lease or sale ⅞ mineral with surface fee. Exceptionally low prices. O. M. Kendall, P. O. Box 1325, Houston, Tex.

HUNDRED barrels settled, shallow, Oklahoma production. Large acreage, sure locations. Box 1629, Tulsa, Okla.

FOR SEMINOLE and Pottawatomie County leases & royalties, write or wire Brown Brothers and Company, Seminole, Oklahoma, and Shawnee, Oklahoma.

PECOS COUNTY—40 acre lease, $10 per acre, 10 acre tracts. Adrion Skinner, Box 11, Borger, Tex.

NEAR DRILLING WELL
We are drilling wildcat in Castro County, Texas. Seven miles North of Gulf test, sixty-two miles Southwest of Amarillo. Driller paid. Would sell a few leases.
A. T. WINN,
22 Askew Bldg., Amarillo, Texas.

IF YOU WANT TO BUY
Oil leases, royalties, acreage in fee, or a drilling contract, anywhere in the Big Bend district of Texas, write or wire.
JOHN CHRISTIE & CO.
Investment Brokers
Alpine, Tex.

AMARILLO PANHANDLE OIL FIELD
Underwriter Brainard Ranch oil and gas leases, 25,000 acres in Hutchinson County. Hutchinson County is the major producing area. New 5-year leases from 20 acres to 160 acres. Bought right, can sell at reasonable price per acre. Write for map and prices. I have handled, as underwriter, over 60,000 acres in the field on which over 80 wells are now drilling or producing. Ed R. Mayer, Amarillo Hotel Bldg., P. O. Box 1186, Amarillo, Tex.

### LEASES—PRODUCTION

WILL GRANT oil and gas lease on the Hereford ranch, which comprises 5,000 acres of patented land, located 24 miles west of Laramie, Wyo., on the Rex Lake anticline; geology and mapping by F. G. Clapp of New York City; other possible anticlines on ranch now being worked out; located 1 mile from railroad and pipe line; land located on the structure has four producing wells. Will mail geological map and report to responsible parties. We request an immediate well and ⅛ royalty.

DAVIS & THOMAS, Owners
Box 606 Laramie, Wyo.

LAND, leases, royalties for the small investor. Write for list. Paul McKnight, owner, Hall Bldg., Little Rock, Ark.

PECOS COUNTY, TEXAS; 10-year leases, 10-acre tracts, $15; rental $1. South part Survey 28, Block 9, H. & G. N. Citizens Loan & Mortgage Co., Sioux City, Iowa.

FOR SALE—Acreage in Richland Parish, Louisiana, Field. Take advantage of great opportunity offered in buying land in Richland Parish Field where, should you miss oil or gas, land is worth price as farm land. W. T. Pitts, The Land Man, Indianola, Miss.

NOW is the time to buy cheap, well-located leases, drilling blocks, royalties and mineral fee in west Texas. I can supply your wants. Have had four years' experience in this area in land department for major companies and two years for myself.
G. H. AMERY
515 Rust Bldg., San Angelo, Tex.

1,000 BARRELS production, 40 gravity, best field in Texas. Buyers must be reliable. Can be bought around $1,000 barrel. F. P. Simpson, 517 Worth Building, Fort Worth, Tex.

HAVE large and small blocks oil leases in Texas, in localities where drilling starts soon. Price 10c per acre and up. S. S. Osborn, Metropolitan Hotel, Fort Worth, Tex.

OIL OPERATORS NOTICE—Drilling blocks, protection acreage or royalties in Mississippi or Alabama. Correspondence solicited. Mississippi Oil Exchange, Amory, Miss.

OIL LEASES—Drilling blocks, royalties, lands in fee in Callahan and adjoining counties. Clyde Realty Co., Clyde, Texas.

FOR SALE—Leases and production in Warren, Allen and Barren Counties. Have leases in Barren County joining producing leases and some within half-mile to 1 mile of production. W. P. Harley, Bowling Green, Ky.

SOUTHWEST TEXAS — WINKLER, Loving, Reeves, Ward, Pecos, Culberson Counties.
Drilling blocks. Leases. Royalties.
Ranches in fee.
H. F. Anthony, Pecos, Tex.

WRITE for my state of Texas oil map free. Oil leases exclusively. Reference, Mercantile Agencies.
C. W. WEBSTER
W. T. Waggoner Bldg.
Fort Worth, Tex.

CUBA—Producers, investigate our oil resources! Present production sells to local refinery at $5 per barrel. Offer large drilling block with structure and seeps. Adjoins production. Promotion propositions not wanted. R. G. Lane, P. O. Box 1066, Havana, Cuba.

FOR LEASE—Large drilling block for a test well in Butler County, Kansas. Good structure and in line of production. D. A. Bisagno, Augusta, Kansas.
R. T. Parkin, Box 624, Tucumcari, N. M.

### LEASES—PRODUCTION

HAVE SEVERAL pieces of flush and settled production for sale in Oklahoma and Wichita Falls districts. Prices reasonable and terms can be arranged if necessary. P. O. Box 1144, Dallas, Tex.

FOR SALE or lease, NW ¼ of Section 10, Township 9n, Range 79w, Jackson County, Colorado. Clear title and United States patent. 1½ miles west of the Continental Oil Co. well.
H. S. EVERTS, Owner
731 W. Broadway, San Diego, Calif.

10,000 TO 30,000 acres Brewster County, $1.50 acre, patented land intact. 10,000 acres Crockett County, Block "O," $1.50 acre, rental paid up 10 years. From 40 acres up, Wise County, near well to be drilled, $2 per acre, 5-year lease, $1 rental, also close-up leases and royalties to drilling wells. F. P. Simpson, 515 Worth Bldg., Fort Worth, Tex.

"IN THE TREND"
Southeastern New Mexico and west Texas counties—Lea, Eddy, Chaves, Gaines, Andrews, Winkler, Loving, Ward, Culberson and Pecos Counties, oil and gas leases, royalties and drilling blocks. We buy and sell. F. S. Blackmar, P. O. Box 541, Roswell, N. Mex.

DRILLING BLOCK secured on approved acreage and well supervised; no bonus; we keep some acreage as fee. Nicolle, Petroleum Geologists and Operators, Box 1720, Fort Worth, Tex.

NEW OIL FIELD, Shallow drilling, one well standing full of oil, one well now drilling, several new well locations made. Will sell a few leases at $3. to $5. per acre. P. O. Box 96, Bossier City, La.

FOR SALE—Oil leases in Cimarron, Texas. Beaver and Woods counties. Orbee Lease Co., 1114 Colcord, Bldg., Oklahoma City, Okla.

200 ACRES of land in McCurtain County Okla., $5 per acre, oil and mineral rights included, low tax rate, title certificate given with deed. 80 acres in Southeast part of county Red River bottom land $15 per acre. Also 11,000 acres, no oil or mineral lease make me best offer. P. T. Calahan, Idabel, Oklahoma.

FOR SALE
Leases, Metcalfe County, Ky., near production. Also semiwildcat royalties.
A. W. RICHARDS
Center, Kentucky.

SOUTHEAST NEW MEXICO
Can furnish practically proven leases in Artesia Field, Eddy County. Also other tracts in Eddy, Chaves and Lea Counties. Particulars on request.
H. T. ORCUTT
1114 Colcord Bldg., Oklahoma City, Okla.

### MONEY RAISING

DO YOU NEED MONEY for organizing or financing oil or mining deals? Write 131 E. 13th, Oklahoma City, Okla.

RAISE CAPITAL
Through sale of securities in your corporation; worthy enterprises only; need not qualify under "blue sky" laws; 25 years experience behind plan; give few details first letter.
NORTHCLIFFE CORP.
25 West Forty-third, New York.

### OIL INDUSTRY PRINTING

OIL FIELD LEGAL BLANKS
Leases, assignments, releases, township books, well records, etc. Request on your letterhead gets free catalog. Olds Press, 215 East Third St., Tulsa, Okla.

CONSUMERS' LEDGERS
We are prepared to furnish from stock standard forms of gas meter Consumers' Ledgers. Sample forms and quotations on request. First-class material and workmanship.
DERRICK PUBLISHING CO.
Oil City, Pa.

### FOR SALE—DOGS

FOR SALE—Llewellyn and English setters also rabbit hounds on trial, phamphlets free. O. K. Kennels, Marydel, Md.

# Better Tone in Chicago Spot Market

## Several Refiners Advance Gasoline Quotations. No Quantity Available at Less Than 6½ Cents

By J. B. Waldo

CHICAGO, Mar. 21.—There was a better tone in the spot gasoline market on Monday than during the preceding week. Several refiners who had been selling at the low point of the market advanced their quotations to 6¾ cents and stated that this price was for immediate shipment only, or at most within 10 days. Others were quoting at 6½ cents or as high as 7 cents. A careful check of the market showed that there was at the opening of the week no quantity of motor gasoline available at less than 6½ cents. There were numerous inquiries from dealers asking if the bottom had been reached and many willing to place orders at 6¼ cents for April delivery. This was taken as evidence that gasoline was needed and that the dealers were merely waiting for a stable price more than for any special price.

The actual spot business was not large at the new prices as buyers were trying to induce refiners to accept their business at recent quotations. One thing to be remembered is that many buyers have placed their orders and will not be in the market until they have sold some at least of their recent purchase. These orders have placed some refiners where they are sold ahead, one reason for their increasing their price. The higher gravities were unchanged and no stronger than at the close of last week.

### Kerosene Quiet

Kerosene was quiet with a range of price from 4¾ to 5¼ cents with immediate business going largely at the nickel.

The gas and fuel oil markets were dull and easy in general with occasional quotations as low as $1.10 for refinery fuel oil of 16-18 gravity. Local tank wagon distributors are making a new scale of prices ranging from 6½ cents for Smackover fuel oil to 8½ cents for straw gas oil and distillate in 400-gallon dumps. Some will make these prices effective March 28, while others are applying them to daily deliveries.

### Consumption Increasing

The consumption of gasoline is rapidly increasing and the more rapidly as the roads dry out and the weather improves over the territory. Just how soon this will be reflected in larger orders from dealers is another question.

During the two first months of the year, the deliveries by refiners were a little larger than a year ago and the consumption was less. There is therefore some accumulation from shipments on contracts and there has been quite a bit of stocking up. Many large orders have been placed and delivered. There have been some cancellations of part or all of some of the orders which is apt to be the case with a falling market. The larger jobbers are generally well supplied for a time although there are exceptions. Some of the dealers who stocked up at 8 cents or 7½ cents have bought at lower prices averaging their costs downward. Other dealers, mostly the smaller ones but some sizable concerns, have run so close to the danger line in their hand-to-mouth buying that they have been caught with no gasoline which is unfortunate for them and for their customers. These buyers have caused quite an inquiry at times for cars that could be diverted to give prompt delivery. However, the business is so light that refiners have not shipped cars for diversion either for their own or for marketers' account and the result is that some of the very careful buyers have been obliged to borrow gasoline from some obliging competitor. Take the territory over, it is the general belief that the dealers have very considerable quantities of gasoline stored either from some accumulations from their regular deliveries or from stocks bought for storage.

### Small Quantity of Orders

There was, of course, buying of gasoline last week in this market but the orders were not numerous nor were they large. The total of the gasoline orders booked was certainly moderate or small for the time of the year. There was no easy selling. Orders came hard, due for the most part to the feeling of uncertainty brought about by the reductions in prices of crude and refined products. The fact that the Standard Oil Co. of Indiana had permitted two reductions in crude to pass without reducing its tank wagon scale, added to the reluctance of dealers to place orders and caused a large part of the hesitation. There was a great pressure to sell on the part of certain refiners who have been operating their plants at a large capacity and were finding it difficut to secure a place with the dealers for this extra output. While there was a good deal of talk as to holding prices, for the most part the drift of the market was towards lower levels. It is still a buyers' market and they have the advantage here at least of the numerous sellers all anxious for business. One large jobber in the market from a nearby Indiana city, stated that before he took the train that morning for Chicago he received nine quotations of which six were 6½ cents, two 6⅜ cents and one at 6¼ cents. He was unwilling to name the concern making the lowest figure but insisted that it came from the office of a large refiner. Some of the refiners have quoted as low as 6¼ cents but have claimed that this price was for resale only and that they were not quoting less than 6½ cents to the trade direct but a large buyer usually insists on securing the same price for his business as is quoted for resale.

### Favor Higher Prices

Jobbers who have been talked to here seem to favor higher prices for gasoline at the refinery. They believe that if the refinery prices continue at present levels for any length of time that the result will be further reductions in the tank wagon scale and possibly narrow margins through the season. They believe that it is easier to decline than to advance prices but they have little suggestion as to how this advance in refinery prices is to be secured. Refiners who have been in this market have stated that they were not badly hit as yet and that they had made money at least up to the last few days of last week. Another reason why dealers are really anxious for the refiner to advance his price is that there is an enormous amount of gasoline being sold by the so-called "bootleggers" at cut prices. This may work two ways. The gallonage of the regular dealer is certainly reduced, his profits decreased but it the bootlegger accumulates some capital and a list of customers he is more than likely to blossom out as a regular dealer, one more in an overcrowded list. A case was recently named of a dealer who had been a thorn in the industry as a cut-price artist finally establishing himself in business as a good customer of a very large all around organization and what is more a stickler for holding prices.

### Price Situation

During the earlier part of last week, most of the business in U. S. Motor gasoline was placed at a range of 6¾ to 7 cents but the continued uncertainty and the lack of demand resulted in a gradual shading of this price until at the close of the week just passed several of the large refiners were quoting 6¼ cents to dealers while others were selling at that price if necessary not to lose business, while quoting 6½ and 6¾ cents. There were several refiners who were actually turning down any business that they could not get at 7¼ cents and one of these is credited with holding one of the largest stocks of gasoline in the Mid-Continent Field. The higher gravities were weak, partly in sympathy with the other products and partly because the warm weather had made them unnecessary. Refiners of the antiknock gasoline report that the business in these grades is good and of course the business done in these products is just so much taken from the total sale of the regular products.

Natural gasoline continued easy and lower in price. Exporters stated that there was nothing doing at present and that the outlook was not encouraging for early orders from them.

### Kerosene Quiet

Kerosene was quiet and rather easy in tone. The range of prices was narrow, being around 5 cents for the 41-43 gravity with little business doing in the 42-44 gravity, offerings of which are light. The plowing season is now close at hand and has begun in many sections. But some at least of the distributors are not stocking up as yet if at all, as they say that they will have to carry much of this business done until next fall before payments will be made and that the burden is too much for them to carry.

### Distillate Season Ends

Distillates have simply dropped out of the picture, the season having come to an end. What consumption there is is being cared for from stocks held by the dealers. There are a great many unsettled contracts on which the full quantity ordered has not been taken and while most of these contracts are being settled, there are others that are not and the final windup of the distillate season of 1926-27 will leave a bad taste with many refiners and marketers to say nothing of the distributors who are greatly disappointed at the poor results for them, a condition due to an extremely mild winter over most of the territory.

### Gas Oil

Some gas oil is being moved for the use of small burners, some of them in homes and others in public buildings, small industrial plants and the like so that there is some demand for the low flash, clean oil and this is quoted at little higher than the ordinary grades but the zero oils have seen their day for this season. It would seem impossible that there should be even a temporary resumption of the domestic demand as the season has progressed so far that any cold spell would be brief. It might do a lot of harm to the early fruits but could do little good for the oil man. The industrial demand is rather light, small orders for the most part consumers reducing their stocks and buying for prompt shipment chiefly. It is a very narrow and unprofitable market, for the seller at least. There is a general feeling that more straightrun gas oil will be available this spring as there are some if not a considerable number of refiners who are not likely to run their cracking plants as heavily as last year. On the other hand, with plants run as skimmers only, the supply of gas and fuel oils will show some substantial increases.

### Fuel Oil Weaker

The fuel oil market has finally begun to show a little weakening in practically all gravities. The premium on zero oils has just about disappeared. Some buyers are still asking for a zero oil but this is really not required at present and few will pay extra for an oil below a 30-degree cold test. There has been little active inquiry for any sizable quantities. Some business has been placed in Ohio but in direct competition with local plants that are making very low prices. The Otis Steel Co. of Cleveland bought 1,000,000 gallons, according to those who bid for the order, at 6 cents delivered or $1.08 Group 3. An order for three train loads was secured by a Chicago marketer from the Large Chemical Co. at Barberton, Ohio, at a price stated to be $1.10 Group 3 basis. There is very strong competition in Ohio for all petroleum products, even gasoline being sold in that state by local refiners at prices very close to a 6-cent basis out of Group 3. Locally there is very little business out of the hand-to-mouth class. The larger plants that are not covered by contracts are buying for 30 to 60 days only. One reason that they give for this is that they have no large business ahead. Another that the price of fuel oil is too high compared with the crude costs. Some of the railroad contracts based on crude are turning out more to the favor of the buyer than the seller expected when the contract was made.

The coal strike is playing very little part in the situation right now. The larger industries are well supplied with coal and at present the coal buyers are holding back their coal orders and rather demoralizing the coal market. If the supply of fuel oil should be greatly increased and supplies prove burdensome this might prove an argument against an early settlement of the coal strike.

There have been no very free offerings of fuel oil. It is possible to buy a little lower than a week or two weeks ago. The difference is not great. Quotations by dealers on the 24-26 gravity oil are 5 cents lower than a month ago and 2½ cents less than a week ago with most dealers. There has been very little short selling; some, but not much. The decline in the price of Smackover crude has been felt to some extent in the quotations of Smackover treated oil, but the fully treated oil is not in great supply and the decline in quotations is not more than 5 cents a barrel for the fully treated oil. The supply of crude is limited and it is not likely that the market for Smackover fuel oil will follow the crude price all the way down.

Refiners state that the lubricating oil situation is unchanged but that there is a great deal of competition between producers of all grades. The supply of Pennsylvania crude is very largely owned by the refiners and they are holding for full prices for their product. Some of the southwestern refiners have been making prices lower than what is claimed to be the market apparently with the thought that all the refiners would have to reflect the crude cuts in their quotations for lubricating oils. Several of the largest have reduced their price lists on neutrals and bright stocks. The business doing is stated to be satisfactory on the whole.

### Better Gallonage

The brightest spot in the present situation is the report by practically every important distributor that his gallonage had taken a decided improvement since the early part of the month. This report is made by the larger companies covering the entire territory and by distributors with a local business. Even concerns with stations only in the northern parts of the territory whose business was hit hardest by the heavy snows and bad roads say that they are doing a good business and expect that it will improve from now on. One very carefully managed company

stated that its business at present was running up to last April, which was a good month with it.

Several of the larger distributors, both north and south of this city, have stated that their stocks were ample in connection with the report of increased gallonage and that it would be some time before they would be forced to replenish their supplies. An upturn in the market with any show of continuance back of it would be followed by buying even by those who have considerable stocks on hand. There is every indication that the consumption this season will show a substantial increase. The trouble is not so much with the demand as with the supply. It has been pointed out in this connection that if refiners would think in gallons of gasoline produced rather than in barrels of crude run it would help them to arrive at a more correct understanding of the situation in gasoline.

There are hundreds of garages, if not thousands, in this city where the regular customer who keeps his car in the garage or stores it there during the day receives a discount of 2 cents from the station price. If the garage is a customer of one of the local tank wagon distributors he has a price of 16 cents less 1 for quantities over 100 gallons at a dump which he can always secure and a further Q. D. A. of 1 to 3 cents according to the quantity purchased each month.

## Mack P. Colt Buys Sun Co. Properties In the Lima Field

TOLEDO, Ohio, Mar. 19.—One of the largest deals in oil properties made in the old Lima Field of northwestern Ohio for a number of years took place this week when Mack P. Colt, veteran oil operator, supply man and president of the Oko Oil & Gas Co. of Lima, took over the Sun Oil Co.'s producing properties in Wood, Hancock, Sandusky and Seneca Counties in Ohio. The deal takes with it a total of 300 wells, leases, all equipment, 300 miles of pipe lines and a net production of approximately 100 bbls. per day.

Mr. Colt, as old-time operators will remember, at one time owned more than 1,100 wells in the Lima Field and is now one of the large operators in the field. Some of the wells just purchased have produced for many years in all four counties. In the Tiffin Field of Seneca County, which is the deeper production, the Trenton is found at from 1,400 to 1,700 feet and many of the wells drilled below 250 feet in the Trenton where the best pays were found. No doubt these wells will be rejuvenated by cleaning out and may then produce steadily for years to come.

With the producing wells is a large amount of material as all leases are connected with power pumping plants, thousands of feet of casing, drive pipe, lead lines, shackle rods, etc., and the well material is in excellent shape. Wells that are really too small to pay will be pulled out and properly abandoned; others will be kept on the power plants.

The amount in the deal was not revealed although it runs into the hundreds of thousands, being larger than when the Paragon Refining Co. sold its production and wells in the Lima Field to Mr. Colt a few years ago.

### VETERAN OPERATOR DEAD

John D. DeHart, veteran oil operator, aged 84, died last week at his home at Petaluma, Calif. During the Titusville excitement, he was manufacturing oil barrels and hauling oil from the first producers ever drilled. He migrated to Bartlesville in 1905 and continued active, particularly in the Osage, until 1920, when he sold his Osage interests to the Phillips Petroleum Corp., and retired. Surviving are his widow and four children, Mrs. E. B. Curtis and J. L. DeHart of Amarillo, Tex.; Mrs. H. Stapley Rogers of Petaluma, Calif., and J. E. DeHart of Tulsa, Okla.

# EASTERN REFINED MARKET WEAK DUE TO BIG LIGHT OIL OUTPUT

By N. O. Fanning

*New York Bureau, The Oil and Gas Journal, Room 629, No. 101 Park Avenue, New York, N. Y.*

NEW YORK, Mar. 19.—There is considerable weakness in the eastern refined oil markets at the present time, due largely to the influence of the large high-grade oil production in the Mid-Continent Field. This has apparently frightened some refiners who appear to be dumping U. S. Motor gasoline at the lowest prices seen in several years. Offerings of motor gasoline in tank cars have been reported at as low as 10 cents a gallon, the source of this being the Mid-Continent. This is equivalent to about 6 cents, Tulsa, Okla., basis. On this basis refiners are obviously losing money, but the action of the principal marketers here indicates a willingness to meet all competition. The lowest price yet quoted by the larger marketers for U. S. Motor gasoline has been 11 cents. At least no actual sales have been reported below that level.

The gasoline situation here is one of intense interest. So far as Seminole production and the general production situation is concerned it does not seem possible that this situation has yet caused any change in refinery operations, in such a way as to cause dumping of gasoline. Most of the anxiety to sell seems to be due in part at least to fright over the possibilities rather than to actual overproduction of gasoline. Eastern refiners are marketing large quantities of California gasoline in the eastern market. It would not appear that this operation could be very profitable on the basis of 11-cent motor gasoline on the Atlantic Seaboard. If it is profitable, it is difficult to see why it has not resulted in any weakness in the price situation before this. In other words, if it is possible to sell California gasoline here for 11 cents at a profit, it is remarkable that this cheap gasoline has not broken the market before this, while Mid-Continent gasoline, selling here for 11 cents, does break the market.

The latest change in the gasoline tank wagon market was a reduction of 1 cent a gallon on March 15, to 20 cents by the Standard Oil Co. of New York throughout its territory. On March 14, the Standard Oil Co. of New Jersey cut the tank wagon price 1 cent throughout its territory, making the new New Jersey price 17 cents a gallon.

The weather has been ideal from the viewpoint of gasoline consumption for more than a week. Certainly Nature is doing all it can to help the oil business, from the viewpoint of supplying good weather. Consumption for March in this section is expected to be more than 20 per cent above March, 1926, which was a bad month.

### Kerosene Weak

The weakness in kerosene continues, due to limited export sales, and heavier stocks in refiners' tanks. On March 10, the Standard Oil Co. of New York reduced the tank wagon price throughout its territory 1 cent to 16 cents. The Bayonne refinery price of water white kerosene is now down to a new low of 7½ cents a gallon.

### Gas and Fuel Oil

There is no change in the gas and fuel oil markets, prices holding much more firmly than in the markets for other refined oil products. Diesel oil continues to be quoted at $2.50 a barrel, while bunker fuel is $1.75 a barrel. The steadiness of fuel oil may be attributed in part to strength in the coal market.

Furnace oil demand has been exceptionally good during the winter, but with much warmer weather now consumption is falling off somewhat. Coal men admit freely that furnace oil has cut deeply into their business throughout the East, and oil men believe the outlook is extremely favorable in view of the tendency toward lower oil prices.

### Lub Oils Reduced

Lubricating oil prices have been cut all along the line, despite a marked gain in consumption in the past few weeks. Both motor and industrial consumption is said to be remarkably good for this time of year.

Reductions in Bayonne lubricating oil prices range from one-half to 1 cent. Only a few grades were not affected. This is the first cut this year and is largely due to weakness in the crude oil market.

Paraffin wax continues firm, and the demand has improved steadily during the past week.

Petrolatums are in good demand and prices are unchanged.

### The Export Market

An extremely restricted export movement from this port was the rule during the past week. Exporters say that most foreign buying at present covers requirements for April and May, and represents the action of foreign marketers in stocking up for the summer. A contraction might be expected as soon as this forward buying stops.

The price of gasoline was cut March 15, in England 2 pence a gallon, or approximately 4 cents. This is said to be due to competitive conditions. The price of gasoline is now at the lowest point in years.

The export movement of oil from New York continued small during the week ended March 16. Several good-sized cased oil consignments went out, but there was not a single bulk shipment. Exports of gasoline in cases totaled 1,411,520 gallons, and of kerosene 1,458,920 gallons. Barrel exports of lubricating oil amounted only to 27,100 gallons, while shipments in cases showed a fairly large increase, amounting to 327,240 gallons, against 263,940 the preceding week.

### Petroleum Exports

The following table shows principal exports of petroleum and petroleum products from New York during the last three weeks (all figures in gallons unless otherwise noted):

| | Week Ended | | |
|---|---|---|---|
| Gasoline: | Mar. 16 | Mar. 9 | Mar. 2 |
| Bulk | ..... | 478,025 | 4,241,000 |
| Cases | 1,411,520 | 1,353,240 | 3,032,440 |
| Kerosene: | | | |
| Bulk | ..... | 724,567 | 3,948,000 |
| Cases | 1,458,920 | 2,933,480 | 2,011,330 |
| Fuel oil: | | | |
| Bulk | ..... | ..... | 1,015,000 |
| Lubricating oil: | | | |
| Bulk | ..... | ..... | 4,908,000 |
| Barrels | 27,100 | 507,300 | 278,950 |
| Cases | 327,240 | 263,940 | 147,710 |
| Lubricating grease: | | | |
| Barrels (lbs.) | 631,350 | ..... | 382,950 |
| Paraffin wax: | | | |
| Bags (lbs.) | 829,400 | 336,389 | 1,084,600 |
| Barrels (lbs.) | ..... | 280,250 | 166,875 |
| Petroleum asphalt: | | | |
| Bulk | ..... | ..... | 352,000 |
| Petroleum coke: | | | |
| Bricks (tons) | ..... | ..... | 1,452 |

The foregoing figures include shipments of 500 bbls., 1,000 cases, or more.

### The Tanker Market

The oil tanker chartering market continues active and prices are only a shade below the high record figures recently established.

The Mallory tanker "Beta" was taken by the Tide Water Oil Co. for a series of trips from the Gulf to Bayonne, renewable at the option of the charterer over a period of a year, on an initial rate basis of about 43 cents, for crude petroleum.

The price paid by the Standard Oil Co. of New York for the three 10,000-ton tankers, "Sunoil," "Miller County" and "Agwimoon," is said to have averaged about $85 a ton, or a total of about $2,500,000 for the three. This tonnage is to be used in the intercoastal trade.

The Anglo-Saxon Petroleum Co., a Dutch-Shell subsidiary, has ordered two 12,000-ton motor tankers, to be built in France.

The Warner-Quinlan Co. (manufacturers of asphalt) have chartered the tanker "Torres" for the trade from Tampico to north of Hatteras at 51 cents, according to reports in shipping circles.

### Oil Receipts

Receipts of crude and refined oil at Atlantic Coast ports for the week ended March 16 are estimated at 3,999,000 bbls., a daily average of 571,000 bbls., compared with 4,694,000 bbls., or 670,000 bbls., the preceding week.

Receipts from the Gulf Coast continued heavy, averaging 363,000 bbls. a day, as against 411,000 bbls. a day for the week ended March 9. Receipts from the Pacific Coast were fairly large, averaging 78,000 bbls. a day. Imports amounted to 127,000 bbls. a day, about equally divided as to source between Mexico and South America.

### Petroleum Receipts

The following table shows estimated daily average receipts of crude and refined oil by water at Atlantic Coast ports for the last three weeks; also monthly record for the last 12 months (figures in barrels):

| | Week Ended | | |
|---|---|---|---|
| | Mar. 16 | Mar. 9 | Mar. 2 |
| Gulf Coast | 363,000 | 411,000 | 269,000 |
| Pacific Coast | 78,000 | 126,000 | 117,000 |
| Mexico | 67,000 | 36,000 | 39,000 |
| South America | 63,000 | 97,000 | 73,000 |
| Total | 571,000 | 670,000 | 498,000 |

| Daily Averages by Months | | | | | |
|---|---|---|---|---|---|
| 1927: | Gulf | Pacific | Mexico | S. Am. | Total |
| Feb. | 379,000 | 89,000 | 40,000 | 48,000 | 556,000 |
| Jan. | 362,000 | 73,000 | 49,000 | 61,000 | 545,000 |
| 1926: | | | | | |
| Dec. | 363,000 | 57,000 | 49,000 | 61,000 | 530,000 |
| Nov. | 335,000 | 62,000 | 56,000 | 40,000 | 493,000 |
| Oct. | 270,000 | 71,000 | 61,000 | 43,000 | 445,000 |
| Sept. | 299,000 | 98,000 | 63,000 | 58,000 | 518,000 |
| Aug. | 320,000 | 61,000 | 71,000 | 46,000 | 498,000 |
| July | 360,000 | 66,000 | 115,000 | 36,000 | 577,000 |
| June | 396,000 | 104,000 | 117,000 | 18,000 | 635,000 |
| May | 318,000 | 66,000 | 114,000 | 25,000 | 523,000 |
| April | 326,000 | 92,000 | 126,000 | 20,000 | 564,000 |
| Mar. | 317,000 | 97,000 | 152,000 | 26,000 | 592,000 |

The foregoing figures are based on the carrying capacity of incoming oil-laden tankers.

## CALIFORNIA RECEIPTS AND PETROLEUM IMPORTS

Imports of crude and refined oils at the principal United States ports for the week ended March 12 totaled 1,362,000 bbls., a daily average of 194,572 bbls., compared with 1,430,000 bbls., a daily average of 204,286 bbls. for the week ended March 5 and a daily average of 185,643 bbls. for the four weeks ended March 12.

| | |
|---|---|
| At Atlantic Coast Ports— | |
| Baltimore | ..... |
| Boston | 200,000 |
| New York | 434,000 |
| Philadelphia | 79,000 |
| Others | 213,000 |
| Total | 926,000 |
| Daily average | 132,286 |
| At Gulf Coast Ports— | |
| Galveston district | 18,000 |
| New Orleans and Baton Rouge | 418,000 |
| Port Arthur and Sabine district | ..... |
| Tampa | ..... |
| Total | 436,000 |
| Daily average | 62,286 |
| At All United States Ports— | |
| Total | 1,362,000 |
| Daily average | 194,572 |
| Daily average four weeks ended | 185,643 |

Receipts of California crude and refined oils at Atlantic and Gulf Coast ports for the week ended March 12 totaled 987,000 bbls., a daily average of 141,000 bbls., against 554,000 bbls., a daily average of 79,143 bbls. for the week ended March 5, and a daily average of 78,893 bbls. for the four weeks ended March 12.

| | |
|---|---|
| At Atlantic Coast Ports— | |
| Baltimore | 190,000 |
| Boston | ..... |
| New York | 415,000 |
| Philadelphia | 131,000 |
| Others | 236,000 |
| Total | 972,000 |
| Daily average | 138,857 |
| At Gulf Coast Ports— | |
| Tampa | 15,000 |
| Daily average | 2,143 |
| Total Atlantic and Gulf Coast ports | 987,000 |
| Daily average | 141,000 |
| Daily average four weeks ended | 78,893 |
| Distribution of total California oil receipts is as follows: | |
| Crude | 158,000 |
| Gasoline | 214,000 |
| Gas oil | 70,000 |
| Fuel oil | 545,000 |
| Total | 987,000 |

### HUMBLE LINE TO PANHANDLE

DALLAS, Tex., Mar. 19.—On the Humble pipe line from Comyn to Panhandle there are seven sections of approximately 50 miles to the section; three of these sections are practically completed. The Oklahoma Contracting Co. has gangs working in the balance of these sections and hopes to complete the entire line in about 30 days. About 33⅓ per cent of this 10-inch line is welded, and the balance is screw.

# Unique Features at Macmillan Plant

## Compact Installation Operating With Panhandle Crude Presents New Type Refinery for Mid-Continent Area

By Neil Williams

When the Macmillan Refining Co. fired up its plant at Isom, Tex., in the Panhandle oil field less than two months ago something entirely new in refining processes was given the Mid-Continent. A plant similar in design had been operated for about three years at Long Beach, Calif., by a parent company,—the Macmillan Petroleum Products Co.,—but for most fields east of the Rocky Mountains the installation is a radical departure. The Isom plant even is a marked advancement over the equipment at the Long Beach refinery.

Not only is the equipment unique and operation different but the Macmillan refinery is believed to be one of the few, if not the only one, occupying less than 5 acres of ground capable of running from 4,000 to 4,800 bbls. of crude daily. In fact, the plant is so small and compact that many refinery men were skeptical that it could be operated successfully.

The Macmillan plant so far has proved very adaptable to the refining of Panhandle crude, which, with its high sulphur, salt water and b.s. content and high cold test generally, is conceded as being about as objectionable crude to handle as any to be found. The sulphur content of from 2 to 2.5 per cent and the presence of hydrogen sulphide gas have offered serious corrosion problems while the 2 per cent salt water with considerable sand has been no small handicap.

### Close Fractionation

The efficient results of the plant are attributed by R. S. Macmillan, president of the company, and C. C. Benz, general superintendent of both the Isom and Long Beach plants, to the fine fractionation obtained with the equipment, designed and manufactured by Boner & Sheldon, Los Angeles. The plant was designed to obtain the closest separation of all fractions. Some of the accomplishments along this line are revealed on the company's distillation sheets which show that gasolines, kerosenes and naphthas average only 25 points in fractionation between the 90 per cent mark and the endpoint.

Further close fractionation is indicated in the fact that the plant has enabled the raising of Engler initial boiling points of kerosenes or naphthas to gasoline endpoints. By this, heavy fractions can be eliminated entirely from the lighter products desired. In this connection, it is the opinion of those connected with the Macmillan Refining Co. that much of the secret of refining Panhandle crudes lies in proper fractionation rather than in an excess of chemical treating.

The plant was designed, with Boner and Sheldon as consulting engineers, to operate with a minimum amount of equipment to handle 4,000 bbls. of crude daily. It is of the unit type of construction, and, when necessary to enlarge the refinery, as many units as desired can be placed in line and operated separately. The company has sufficient acreage leased for the installation of two more units.

### Rapid Construction

Before giving a description of the process it is interesting to note that the plant was constructed and in operation within two months from the time the first equipment was ordered. The entire plant is as near fireproof as possible with the towers securely supported on all-steel, welded legs and braces 42 feet high and 5 feet underground. These supports will withstand a fire six hours before falling.

### Method of Operation

As pictured in the accompanying chart the crude charge after receiving an injection of caustic to neutralize some of the action of the sulphur compounds in the crude—is pumped into the system, first through one of three heat exchangers, then a large settling drum, and then through two additional exchangers or preheaters connected continuously. The flow of the crude through these is important as various flows have been tried but the present one has proved the most efficient.

There are three heat exchangers in a line. Each is a southwestern type box with 500 feet of Shelby interchanger steel tubes. Hot fuel oil bottoms flow continuously through the first two interchangers and hot gas oil through the third.

It is through the second "fuel oil to crude" exchanger that the cold crude first is pumped. This crude enters at a temperature of around 80 degrees Fahrenheit and in this first 500 feet of coil is

Flow chart of the Isom refinery of the Macmillan Refining Co.

raised to about 160 to 180 degrees Fahrenheit. The fuel oil flows out to storage at 150 degrees losing 280 degrees in passing through two exchangers. The preheated crude then is pumped into a large horizontal pressure settling drum. This is a cylindrical shell filled with baffles to kill the turbulence of the incoming oil. It is in this drum that much of the salt water and sediment settles out.

The drum is constructed of three-eighths inch plate with one-half inch heads and three-quarter inch manhole plates. It has triple riveted longitudal seams and single riveted girth seams. An automatic relief valve maintains a maximum pressure of 80 pounds in the tank. Drums similar to this are almost essential equipment in the refining of Panhandle crude.

The crude passes out of this drum, leaving practically all the water and sediment, and then through the "gas oil to crude" exchanger and continuously through the remaining "fuel oil to crude" exchanger. In this operation of the three exchangers the crude is raised to 250 degrees at which temperature it passes into the first tower—called the vaporizer or low refractionator—about half way up from the bottom.

### First Gasoline Stream

It is from this low refractionator that one stream of gasoline is taken. Through a unique hookup with a small hot water condenser and a secondary small vaporizer a nice cut of light end gasoline is obtainable. The vapors from the preheated crude entering the low refractionator pass out the top and up into the hot condenser, from which the hot liquefied or semiliquefied vapors drop into the small vaporizer. Here certain desired ends, regulated by automatic temperature controls, are revaporized and pass out through a cold condenser and into storage as a gasoline ranging from 70 to 80 gravity. The reflux from the small vaporizer drops back into the low refractionator with the incoming crude for further fractionation.

This is one instance of the double circulation and double fractionation which takes place in the Macmillan plant, representing a new principle in refining for the Mid-Continent. Each of the three main towers, the low refractionator, the stripper and the high refraction column is equipped similarly. As shown in the accompanying chart and pictuers the hot condensers and secondary vaporizers are suspended above their respective towers. The hot condensers are Southwestern equipment, the first mentioned having 70 tubes and the other two having 170 each. Each of the vaporizers is a cylindrical shell set horizontal just below the condensers, and equipped with automatic temperature controls. In fact, the entire plant is operated almost automatically.

The low refractionator proper is a tower 17 feet high and 4 feet in diameter. From this the topped crude at from 200 degrees to 250 degrees Fahrenheit is drawn off the bottom constantly and by a 10-inch by 6-inch by 12-inch steam hot oil pump is picked up and put through the retort, where the first direct heat is applied. At 4,000 bbls. daily the crude is pumped through the 4-inch line and tubes at 100 pounds pressure.

### Unique Retort

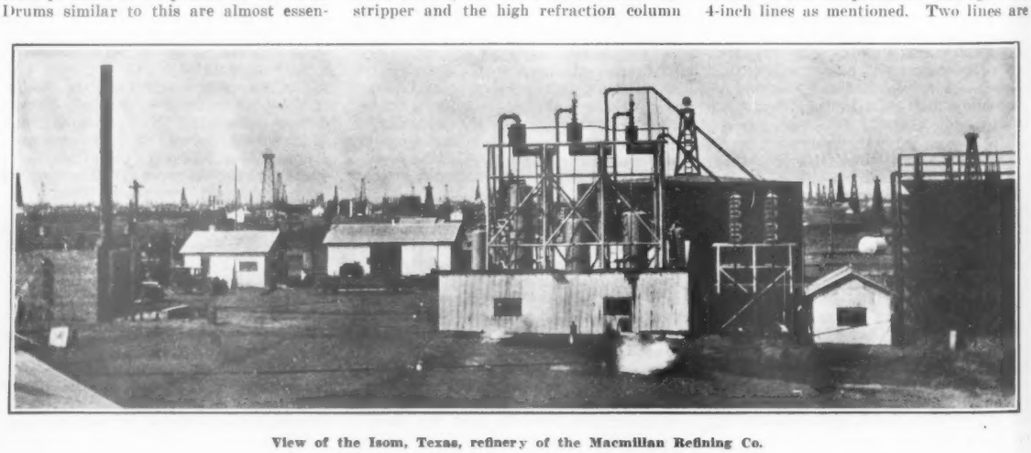
This retort, designed at the plant, also embodies new ideas. It, including combustion chamber and tube space, is 13 feet wide, 22 feet long and 16 feet high. The combustion chamber itself is 8 feet high and in the other 8 feet are 2,400 feet of 4-inch tubes. In front of the retort proper and built underground is a low "dutch oven," 26 inches high, 10 feet wide and 12 feet long.

The retort is operated on a principle of radiated heat, the direct fire being confined to the "dutch oven." The hot gases and radiant heat come in contact with the coils through four passages, using flat baffles resting on the pipes. The retort was designed to operate using an excess of air to prevent burning out of tubes. Temperature of the retort is controlled automatically at 450 to 500 degrees Fahrenheit.

The crude charge enters the retort at from 150 to 200 degrees Fahrenheit, and, heated to 450 degrees, passes through two 4-inch lines into the largest of the towers, the stripper (No. 1 in the chart), where all ends except fuel oil are taken off. The fuel oil is drawn off the bottom at 430 degrees and passes through two of the exchangers preheating the incoming crude as previously described.

This No. 1 tower is 21 feet high and 4 feet in diameter and has two compartments, one above the other. Between the two compartments is a gas oil reboiling section, through which the heavy gas oil ends are refluxed to an adjoining gas oil flash tower of smaller dimensions.

In the operation of this tower the hot crude from the retort enters at the top of the lower compartment through two 4-inch lines as mentioned. Two lines are



View of the Isom, Texas, refinery of the Macmillan Refining Co.

necessary to handle all the hot crude the retort supplies. The charge is met by a flash of steam and at a temperature of 450 degrees all vapor ends except the fuel oil pass up through the gas oil reboiling section through tubes and into the upper section of the tower.

In this upper compartment is a perforated tower arrangement, through which the vapors rise and the undesired ends knocked back as they are washed or come in contact with the refluxed ends from the secondary vaporizer suspended above the tower. The heavier ends are refluxed through the gas oil reboiler where some are revaporized and refractionated while the remainder flow into the adjoining flash tower where the flow is met by another injection of steam.

It is here that further close fractionation takes place by stripping the gas oil of all of the lighter ends, the gas oil cut passing off the bottom and then through the "gas oil to crude" heat exchanger. The lighter vapors in this operation go from the top of this tower and back into the upper compartment of the stripper for additional separation of gas oil ends.

**No. 2 Tower**

The lighter ends desired go out the top of this stripper, regulated by temperature controls, through the hot condenser and then into the secondary vaporizer where the same process takes place as previously described in the low refractionator. The undesired ends are refluxed into the stripper for further refractionation and the vapors are taken off the top and pass into the third tower, the high refractionator (No. 2 in the chart).

It is in this third and last tower, together with another small flash tower, that a final separation of light and heavy ends is made. At present the plant is running for export 64-66 375 gasoline, and the separation is between this product and naphtha. If the plant were running for U. S. Motor 58-60 437 gasoline the separation would be to cut out the kerosene.

The vapors, which include all ends except gas oil, from the gas oil stripping tower enter the high refractionator at the bottom. In here as the vapors rise to the top by temperature regulation of the reflux from the secondary vaporizer at the top, the undesired ends as kerosene or naphtha, as the case may be, are knocked back to the bottom and are pumped out into the kerosene and naphtha flash tower where they are met by a flash of steam. Here another close fractionation takes place and any remaining gasoline ends are flashed in vapor form out the top and into the low refractionator, or first tower where they are refractionated with vapors from the preheated crude entering the system. The kerosene or naphtha bottoms from the flash tower are drawn off, treated, and run to storage.

In the high refractionator the lighter vapors pass out the top, and, as is the case with the other towers, through the hot water condenser, vaporizer, cold condenser, and then to the treating plant and storage. In addition to the caustic injected into the cold crude entering the system, caustic also is injected in the gasoline vapor lines from the high refractionator and low refractionator towers, and in all about 600 pounds to a run of 4,000 bbls. of crude is used.

**Treating Method**

Treating of gasolines at the plant is by the lead sulphide process developed by the Amarillo Refining Co. at Amarillo, but with an individual application worked out by the Macmillan Refining Co. for which patents have been asked. The company also has worked out a satisfactory method for the treating of kerosene.

Corrosion troubles both from sulphur compounds in the crude and hydrogen sulphide gas have been limited to a large extent through the operation of the plant at comparatively low temperatures. The free use of steam in the fractionation process permits the plant to be operated at the low temperature and also tends to minimize sulphur problems.

The plant throughout has been designed to operate with a minimum of overhead. The standardization of all pumps into three general types permits an easy and economical replacement of parts and operation, the latter being simplified by the segregation of virtually all pumps under one building. Expense of fuel to heat boiler water is minimized by the use of the hot water from hot condensers over the towers to feed the boilers while residue steam is put to use on crude lines and in crude tanks to keep the oil at a temperature at which it will flow readily. The high cold test of the oil makes this necessary and all tanks are equipped with steam coils. Live steam is generated in two semiportable type boilers.

To insure a steady supply of soft water for the plant a zeolite water softening unit will be installed at once. The plant is circulating approximately 400 bbls. of water hourly. A Southwestern cooling tower, 20 feet high, 12 feet wide and 24 feet long, is used. Another feature of the plants is that the entire site is lighted at night by three floodlights.

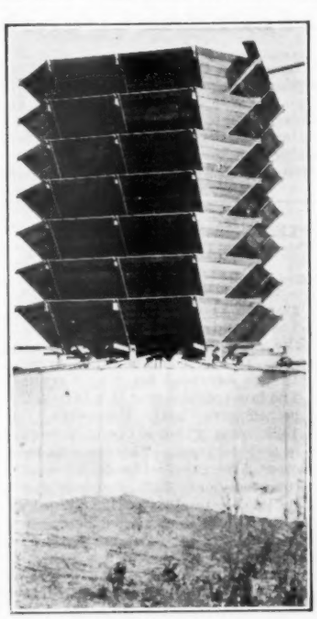
The plant at present is taking a little more than a 50 per cent overhead cut, the remainder, except for a small loss, being fuel oil. The entire output of fuel oil is contracted to railroads. Other products, now principally higher gravity gasolines, are disposed of through export channels.

An interesting sidelight in the operation of the plant is the fact that a barrel of crude oil takes only an hour and a half to pass through the entire system.

## OPERATION OF AIR LIFT AT SEMINOLE

(Continued from Page 39)

weeks. The sensitiveness of these wells may be illustrated by the action of a well In the heart of the field. It had been flowing and suddenly went dead. The tools were rigged up, and preparations made to run a string of tubing. The well suddenly started flowing very lighily. The string of tubing was started towards the bottom of the well, and when it had been run about 600 feet, the well stopped flowing. The tubing was raised immediately, and when it was within 100 feet of the



*A tower for cooling engine water for an air-gas lift station.*

casinghead, the well again started flowing, and had a long flowing life by artificial means.

There have been several instances where flowing wells have been stopped entirely by the entrance of a string of clean-out tools. The placing of the slightest back pressure on the wells seems to have a detrimental effect upon their flow.

In the south end of the field, a well had been flowing 3,700 bbls. daily. For minor changes in the tank battery, the flow line was shifted from the separator and laid directly into the stock tanks. The well's flow increased hourly until it was producing 7,800 bbls. daily, and it maintained a rate of flow better than 7,000 bbls. daily for three weeks. In this case the flow line was very long, and had several right angle turns between the casinghead and the separator.

**Slippage Eliminated**

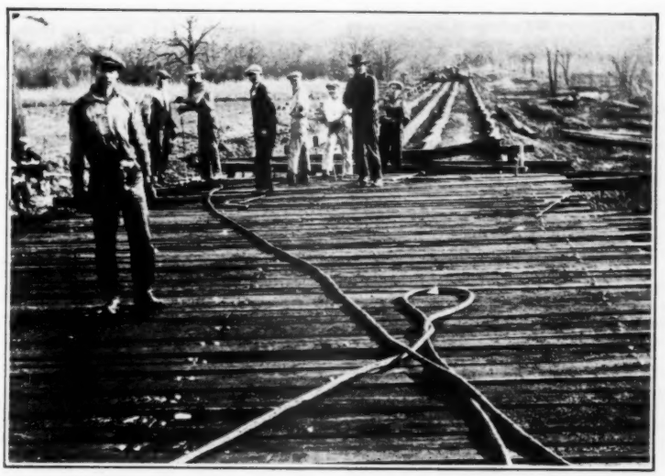
In no other field has slippage been eliminated as it has in the Seminole Field, and the flow lines present a conglomeration of 45 and even 35-degree bends between the well head and the separators. Too little attention has been paid to this item in past times, but we are gradually learning how to produce oil efficiently and economically after almost six decades of experience.

When oil comes from the casinghead it generally contains a percentage of gas in the flow line along with the oil. Due to the difference in specific gravity of the oil and the gas, there is a different rate of speed in their travel through the line, and this is termed slippage. It was demonstrated on one lease (to a man who had been engaged in the business of oil production all his life) that, although a flow line was running down hill, the extra length of the line required more energy to flow the oil than the entire 4,000 feet which the oil was raised from the sand to the casinghead. In considering this, it must be recalled that, although the line ran down hill and the oil was inclined to gravitate down, the gas does not run down hill, but rises to the top of the flow line, and offers great resistance to the passage of the oil.

The elimination of bends in lines has been supplemented by the more general use of oil and gas separators. Former practice has been to use only one separator for each battery of tanks, and it has been found advantageous to place a separator at each well in order to relieve the oil of the gas as soon as possible, and allow only the oil to flow on through the lines. This practice in the Seminole Field resulted in the production of one well being increased from 2,200 bbls. to 3,000 bbls. daily, and this figure illustrates the efficacy of the system. The theory of modern production practice seems to be to relieve the oil of the gas as soon as possible.

**Road Conditions Hamper**

Road conditions in the Seminole Field have hampered the movement of equipment and especially the heavier equipment. The heavy compressors and engines have been difficult to transport from the town to the location in the field. The picture accompanying this story shows a rather unusual feature of oil-field road construction. The heavy timbers shown are "dead wood," or roof braces as they should be properly named, which were installed in 55,000-bbl. tanks in the Yale, Okla., Field 10 years ago. They served their purpose in maintaining the roofs of the tanks for a decade, and then the tanks were cut down and removed to Seminole. It was found advisable to change the style of roof on the new locations, and the dead wood apparently had no use. There was a long mudhole which ran about 1,500 feet along the main road through the field, and it was so deep that four horses had been drowned in it. A small car of popular make slipped into the morass and was buried up to the roof of the body. The old dead wood was used as shown to build a road across the low spot. The timbers were strung on 10 by



*A new use for old dead wood. Roof braces used for ten years in 55,000-barrel tanks now building a plank road through a mudhole at Seminole. Four horses were drowned in this hole.*

10 foundations, and the cross pieces are 6 by 6 and 8 by 8. To drive spikes through them would have split them, and so a small hole was bored about a half inch deep with an auger as illustrated. The spikes were then places in the holes and driven through with an air hammer, which is shown connected to the hose in the foreground, and in this manner the mudhole was conquered.

Sixty days hence some idea of the future of the air lift system in the Seminole Field will be possible, and by that time many of the leases being produced by the system should show a decline sufficient and constant enough to draw a decline curve. The present tendency is an increase rather than a decrease. When the wells which have been on the air-gas system for some time show a decline over a period of time, figures in Seminole will be within the realm of possibilities. Until then, guesses must be used, and one guess may be considered as good as another.

## NORTH TEXAS MARKET WAS GENERALLY WEAK

WICHITA FALLS, Tex., Mar. 21.—The refined market in the North Texas area has been generally weak in practically all products during the past week. All grades of gasoline continued to decline last week with the greatest reduction in the high gravity grades. The 58-60 U. S. Motor grade sold as low as 6 cents, although a majority of the refiners are refusing to sell under 6½ cents. The 60-62 400 sold at 7 cents, with 7½ the prevailing quotation for 64-64 375.

Fuel oils weakened, with indications that additional price drops are to be expected. This area enjoys an exceptionally strong local market due to the purchases of railroads. The price has been steady at $1.50 or above. The past week it dropped 15 to 20 cents. Gas oils are also slightly lower.

Kerosenes were available at 4¾ cents for the 41-43 grade. Natural gasolines in this section and also the Breckenridge area held fairly steady.

# REFINING AND MARKETING

## GASOLINE CONSUMPTION GAINED IN JANUARY

Reflecting a situation which was shown in the Bureau of Mines reports covering refinery gasoline shipments, the gasoline consumption in January of this year shower a relatively small increase over the same month last year, based on gasoline tax receipts obtained by the American Petroleum Institute from 38 representative states. The increase for January, 1927, over the previous January was only 31,140,000 gallons or 7.9 per cent.

The states of Arkansas, Idaho, Minnesota, Missouri, New Hampshire, North Carolina, North Dakota, Oklahoma and Wisconsin actually consumed less gasoline in January of this year than they did the corresponding month of 1926.

Daily average consumption for January, 1927, was 13,790,000 gallons, compared with a daily average of 15,402,000 gallons in December, 1926, a decrease in daily average during January of 9.0 per cent.

The figures giving the quantity of gasoline sold or offered for sale, as reported under the various laws, follow: In some cases they are gross figures before deductions allowed for small quantities of gasoline reshipped or sold for other than taxable use, the tax upon which if paid, is subsequently refunded. All figures are subject to revision.

**Gasoline Consumption by States**
**January, 1927**

| | Gallons | |
|---|---|---|
| | Jan., 1927 | Jan., 1926 |
| Alabama | 10,141,000 | 8,416,000 |
| Arizona | 2,626,000 | 2,261,000 |
| Arkansas | 7,156,000 | 7,927,000 |
| Colorado | 8,157,000 | 6,550,000 |
| Connecticut | 7,750,000 | 7,446,000 |
| Delaware | 1,179,000 | 680,000 |
| District of Columbia | 3,879,000 | 3,417,000 |
| Florida | 25,111,000 | 26,181,000 |
| Georgia | 16,370,000 | 13,433,000 |
| Idaho | 1,764,000 | 1,876,000 |
| Indiana | 22,576,000 | 20,556,000 |
| Iowa | 16,847,000 | 14,938,000 |
| Kansas | 16,619,000 | 14,123,000 |
| Louisiana | 11,606,000 | 8,886,000 |
| Maine | 2,425,000 | 1,596,000 |
| Michigan | 34,180,000 | 30,507,000 |
| Minnesota | 12,148,000 | 15,450,000 |
| Mississippi | 8,336,000 | 6,619,000 |
| Missouri | 22,177,000 | 23,530,000 |
| Nebraska | 10,869,000 | 9,247,000 |
| Nevada | 618,000 | 531,000 |
| New Hampshire | 1,446,000 | 1,450,000 |
| New Mexico | 2,013,000 | 1,474,000 |
| North Carolina | 16,291,000 | 16,342,000 |
| North Dakota | 2,276,000 | 4,295,000 |
| Ohio | 41,350,000 | 39,711,000 |
| Oklahoma | 16,455,000 | 16,783,000 |
| Oregon | 6,514,000 | 6,387,000 |
| Rhode Island | 3,329,000 | 2,950,000 |
| South Carolina | 6,551,000 | 6,423,000 |
| South Dakota | 5,135,000 | 4,232,000 |
| Texas | 41,961,000 | 33,139,000 |
| Utah | 2,622,000 | 2,495,000 |
| Virginia | 9,252,000 | 8,588,000 |
| Washington | 11,205,000 | 10,268,000 |
| West Virginia | 4,268,000 | 3,578,000 |
| Wisconsin | 12,887,000 | 13,083,000 |
| Wyoming | 1,394,000 | 975,000 |
| Total | 427,483,000 | 396,343,000 |
| Daily average | 13,790,000 | 12,785,000 |
| Increase over previous year— | | |
| Amount | 31,140,000 | |
| Percentage | 7.9% | |

### UPHOLDS TEXAS TAX

AUSTIN, Tex., Mar. 17.—The Supreme Court has rendered a decision upholding the validity of the 1-cent gasoline tax which prevailed in the State until yesterday when a new law proovviding for a 3-cent tax became effective. The law providing for the 1-cent tax was attacked by the Pioneer Oil & Refining Co. of San Antonio, on the ground that the law was ambiguous regarding the definition of the words "wholesale" and "retail." The lower courts had upheld the contentions of the plaintiffs in the case.

### BOUGHT BY MID-CONTINENT

The Mid-Continent Petroleum Corp., Tulsa, Okla., added to its bulk and service station facilities through the purchase of the properties of J. C. Goodman et Newcastle, Ind. The properties consist of five service stations and two bulk stations, located in and near Newcastle.

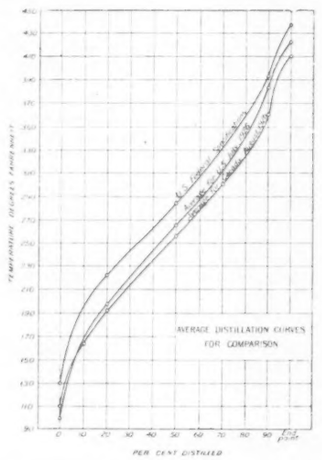
## GASOLINE IN CANADA SUPERIOR TO THAT SOLD IN UNITED STATES

Gasoline retailed in Canada is superior to that sold in the United States, according to a survey made by the Fuels and Fuel Testing Division of the Department of Mines, Ottawa, Canada. The report of the tests which were made in Canada last year have just been released by the Canadian Government.

In summarizing the report the government bureau stated "76 samples of gasoline were collected in August, 1926, from 13 widely separated Canadian cities and may be accepted as representative of the gasoline sold in Canada at that time.

"The analyses and detailed examination of these samples show that the average gasoline sold during 1926 was of good quality, being superior to that sold in 1925 and very nearly equal to that sold in 1924. The average distillation curves show that the gasoline sold in Canada was superior to that sold in the United States during July, 1926, and also superior to the United States Federal specifications for U. S. Motor gasoline. The variation in quality was less during 1926 than during 1925 and 1924."

The following table gives a summary of the surveys which have been made in Canada since 1916 and the chart shows the distillation curves for the Canadian gasoline, the U. S. Motor gasoline and




the gasoline commonly sold in the United States:

**DISTILLATION RANGE**

| | First Drop °F. | 10 Pct. °F. | 20 Pct. °F. | 50 Pct. °F. | 70 Pct. °F. | 90 Pct. °F. | E.P. °F. | Recovery | Sp. Gr. |
|---|---|---|---|---|---|---|---|---|---|
| Canada, 1916 | 125 | 170 | 192 | 237 | 270 | 330 | 380 | .... | 0.732 |
| Canada, 1923 | 120 | 170 | 193 | 255 | 296 | 358 | 423 | 97.1 | 0.737 |
| Canada, 1924 | 113 | 173 | 195 | 249 | 288 | 347 | 410 | 97.4 | 0.736 |
| Canada, 1925 | 116 | 174 | 199 | 258 | 299 | 359 | 412 | 97.0 | 0.739 |
| Canada, 1926 | 110 | 164 | 191 | 256 | 300 | 360 | 410 | 97.4 | 0.739 |
| United States, July, 1926 | 100 | ... | 194 | 266 | ... | 382 | 421 | 96.7 | 0.750 |
| U. S. Federal specification | 131 | ... | 221 | 284 | ... | 392 | 437 | .... | ..... |

## OKLAHOMA REFINERS MAY APPEAL RATE DECISION TO FEDERAL COURTS

The possibility that a group of northeastern Oklahoma refiners will carry their fight to Federal Courts to prevent higher freight rates becoming effective from their plants, looms as a result of the Interstate Commerce Commission's refusal to further consider the issues involved in the so-called "Mid-Continent Rate Case." The commission last week declined to reconsider a former decision in which it had refused to open a case decided adversely to the Oklahoma refiners.

With the case now definitely decided so far as the Interstate Commerce Commission is concerned, the only relief possible to the Oklahoma refiners is through an injunction action against the commission or the Southwestern carriers who are to put the new rates into effect or both. A meeting is to be held this week in Tulsa at which time a decision will probably be made as to whether the case shall be taken to the Federal Courts.

As the case now stands the new rates will become effective May 20. The Interstate Commerce Commission issued an order to the railroads to have the new rates in effect by April 20. On the petition of the carriers this date was postponed last week to May 20. The carriers have also petitioned the commission seeking relief from the Fourth Section of the Interstate Commission Act in which the carriers are required to establish rates to intermediate points in line with their through rates. The task of revising their tariffs in line with the commission's decision is a mammoth one and the railroads have stated that it will be impossible to have their rates established to intermediate points by May 20.

The case which is now finally decided so far as the Interstate Commerce Commission is concerned originated in 1924 when a group of Kansas City, Mo. and Kansas refiners made certain Southwestern carriers defendants in a petition seeking an increase in their differentials under Oklahoma (Group 3) by lowering their rates to certain points in the Western Trunk Line territory. Before the case was finally decided by the commission in July, 1926, practically every refinery group in the Southwest was brought into the case as plaintiffs or intervenors.

The commission's decision at the time was generally considered more favorable to the defendant carriers than any of the plaintiffs and other interested parties. The differential sought by the Kansas and Kansas City, Mo. refiners was granted although it was secured by raising the rates of Oklahoma refiners and other refinery groups to the south rather than by lowering their own rates.

It was felt that the Oklahoma refiners were especially hard hit by the new rate structure and since the decision a group of northeastern Oklahoma refiners has used every means possible to bring about a reopening of the case. The Barnsdall Refineries, Inc., Mid-Continent Petroleum Corp., Producers and Refiners Corp., Shaffer Oil & Refining Co., Tidal Refining Co., Transcontinental Oil Co., Marland Refining Co. and the Independent Oil & Gas Co.—all with refineries in northeast Oklahoma—joined in seeking to have the case reopened. They were joined by some of the commercial organizations including the St. Louis Chamber of Commerce.

A peculiar feature of the case is that the Southwestern carriers generally do not want the higher rates to go into effect and have joined with the refiners in attempting to have the case reopened. The position of the carriers is that the rates prescribed by the commission will work a permanent hardship on certain refinery groups in the Mid-Continent—especially Oklahoma—and ultimately affect the volume of business they are now securing from the southwestern area. These carriers could have made the new rates effective before the first of the year if they so desired. Nothing was done however until the enforcement order was issued by the Interstate Commerce Commission after the first of the year.

It is conceded by all traffic men that the commission's decision complicates the petroleum rate structure generally. It is believed that if the commission's decision stands in regard to the Western Trunk Line territory rate adjustments to other destination groups will be made later. In this connection the Central Freight Association covering territory to the east of the Western Trunk Line territory has attacked the findings in the Mid-Continent case claiming that the rates to be put into effect are too low. This association apparently fears that if the commission makes its decision in the Mid-Continent case the basis of future decisions, that the rates in Central Freight Association territory will be lowered.

### TEXAS, SOUTH DAKOTA GASOLINE TAXES UP

Laws providing for advances in gasoline taxes became effective in Texas and South Dakota during the past week.

In Texas the tax effective March 16 was advanced for 1 to 3 cents. The law provides that this tax shall be effective until September 1, 1928, after which a tax of 2 cents is to be charged. The tax was increased to provide funds for road construction. With a 1-cent tax in 1926 a total of $5,122,847 was collected. It is estimated that with the 3-cent tax the amount this year will exceed $17,000,000.

In South Dakota the tax was advanced from 3 to 4 cents. The additional 1 cent will be added to the tax effective July 1. The added revenue will go to the general fund of the state.

Reports from New York are to the effect that the proposed 2-cent gasoline tax in that state has been definitely killed so far as the present session of the Legislature is concerned.

### CONSUMERS OIL CO. SALE

The sale of the properties of the Consumers Oil Co. of Springfield, Ohio, to the Louisiana Oil Refining Corp. was completed during the past week. The properties involved consist of the five filling stations and a bulk station. R. C. France, who has been managing the properties, will continue in that capacity with the Louisiana corporation.

### CHITTENDEN TO FORT WORTH

I. B. Chittenden has been appointed superintendent of the Texas Pacific Coal & Oil Co. refinery at Fort Worth, Tex. The appointment was effective March 15. Mr. Chittenden has been connected in a consulting capacity with several refineries in the United States and Mexico. He joined the Texas Pacific Coal & Oil Co. organization January 1.

# Technical Questions Answered

BY CHARLES K. FRANCIS, PH.D., TECHNICAL EDITOR

*The Question and Answer Department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry.*

*Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation; also those connected with the marketing and utilization of petroleum products.*

*Questions should be submitted in as much detail as possible so as to assure a satisfactory answer.*

*All inquiries should be signed and if other than the given initials are to be used please indicate the desired letters.*

*Questions involving patented processes, intricate formulas and calculations and estimates of costs, for obvious reasons, cannot be answered. The replies will appear on this page within a reasonable time.*

## HEATING VALUE OF GAS AND COMPRESSION PRESSURES IN GAS ENGINES

**The B.t.u. of a gas has a direct bearing on the size of the engine and compression pressure. Can you give me any figures on this?—W. R. R.**

The higher the heating value of a gas, the lower the compression pressure, because of the heat developed by the compression there is danger of preignition.

Thomsen, Practice of Lubrication, page 453, gives a table showing the average B.t.u. of different kinds of gas together with the corresponding average compression pressures.

| Kind of gas— | Heat Value B.t.u. Per foot | Compression Pressure Lbs. per Sq. in. |
|---|---|---|
| Natural | 1,000 | 100 |
| Illuminating | 600 | 120 |
| Coke oven | 520 | 140 |
| Producer | 130 | 150 |
| Blast furnace | 100 | 190 |

Blast furnace gas, pressure producer gas, and coke oven gas are in most cases local products, frequently by-products, developed where there is a demand for power; engines capable of producing 3,000 to 5,000 horsepower are operated with these low heating value gases. As a rule, the natural gas engines do not produce above 1,500 to 2,000 horsepower.

## COMPOSITION OF FIXED GAS RESIDUE FROM ABSORPTION PLANT

**Have you an analysis showing the composition of the fixed gas content of natural gas after natural gas has passed through an absorption plant? What are the pressure values of the principal hydrocarbons that are found in the fixed gas—F. A. C.**

The composition of the residue remaining after the natural gasoline has been extracted from a gas must depend upon the nature of the raw gas. The fixed gases are those that cannot be reduced to the liquid state at the normal conditions of temperature and pressure. Such gases as nitrogen, oxygen, and carbon dioxide, in addition to the lighter hydrocarbons, enter into the composition of the fixed gas residue to a greater or less extent, according to the quantity of these gases present in the gas as received from the wells. Of course the percentage of the lighter and heavier hydrocarbon gases and vapors varies in different natural gases in the same way that crude oils vary in the nature and the quantity of the light and heavy oils they contain.

The composition of natural gases from West Virginia are given by J. A. Rafferty in the 1923 proceedings of the Association of Natural Gasoline Manufacturers as follows:

| | Gas No. 1 (Per cent by volume) | Gas No. 2 |
|---|---|---|
| Methane | 83.3 | 90.73 |
| Ethane | 10.4 | 5.62 |
| Propane | 4.2 | 2.31 |
| Butane | 1.4 | 0.83 |
| Pentane, etc. | 0.7 | 0.51 |

Gas of this character, after passing through the gasoline extraction process, including absorption, compression and stabilization, produced a final residue of fixed gas having the composition indicated in this analysis:

| | Per cent by volume |
|---|---|
| Methane | 5.2 |
| Ethane | 48.2 |
| Propane | 41.6 |
| Butane, etc. | 4.8 |

The vapor pressures of the hydrocarbons have a direct relation to their boiling points. The lower the boiling point, the higher the vapor pressure as indicated in the following table, from the same paper:

| | Boiling Temperature Normal Pressure (F.) | Vapor Pressure at 60° F. Per sq. in. Absolute Pounds |
|---|---|---|
| Hexane | 156 | 2 |
| Pentane | 97 | 7 |
| Butane | 31 | 25 |
| Propane | —47 | 112 |
| Ethane | —119 | 480 |

The two substances, ethane and propane, which are capable of forming so much pressure, are eliminated from natural gasoline according to the kind of extraction process and to the extent of the weathering.

## SPECIFIC GRAVITY OF PARAFFIN WAX

**Instead of making a gravity determination of melted wax, directions for direct determination on the solid wax are desired, and any information on this would be appreciated?—M. W.**

The following by Morris and Adkins from Industrial Engineering Chemistry, Vol. 19, p. 301, 1927, may serve your purpose:

A modified Nicholson hydrometer was used. The ordinary Nicholson instrument consists of a float carrying a pan on a slender stem above water, and another pan hung from a hook below water. Specific gravity is determined by balancing the sample in air and in water with the addition of weights and calculating the results from the difference in weights used. As the usual metal Nicholson hydrometer has some edges which hold air, and as waxes begin to soften and separate drops of low melting point constituents much below their official melting point, a special glass hydrometer was designed. The pan in the liquid is made of two small crystallizing dishes set up something like a gasometer. The inner one, inverted, has two V notches in the edge to allow a free flow of water in and out. No melted wax can get out as it floats to the top of the inner dish.

The commercial wax contains varying quantities of air which must be removed. Samples used in this work were placed under 30 mm. or less pressure for 24 hours at 140 to 150 Fahrenheit and cooled to room temperature in the same vacuum. The characteristic whiteness of refined wax disappears with this treatment. Air-free samples are of a blue gray color and somewhat translucent. After removing the air, carefully cut samples are weighed on the Nicholson hydrometer in air at 60 Fahrenheit, then placed in the lower pan and weighed in water at the same temperature.

It was found in checking the results obtained by this method, with an ordinary hydrometer, and with a pycnometer, that the same figure was obtained within a reasonable error.

## VISCOSITIES CONVERTED TO TERMS OF DIFFERENT INSTRUMENTS

**Will you kindly publish the table showing how Saybolt Universal, Engler and Redwood viscosity readings may be changed from one to the other.—J. S. P.**

The Saybolt Universal viscosities are the direct readings in seconds of the time required for 60 cc. to flow at 100 or at 210 Fahrenheit. The time for this quantity of water to pass at 100 Fahrenheit is 29 seconds.

The factors given in the following are the numbers by which the known value must be multiplied to convert to terms of the desired standard.

| Saybolt— | Saybolt to Engler | Saybolt to Redwood |
|---|---|---|
| 30 | 0.0352 | 0.95 |
| 40 | 0.0330 | 0.93 |
| 50 | 0.0314 | 0.90 |
| 80 | 0.0286 | 0.86 |
| 100 | 0.0279 | 0.85 |
| 200 | 0.0267 | 0.84 |

Use same factors above 200.

Viscosities when expressed in terms of Engler are known as Engler numbers. An Engler number is derived from the flow time in seconds of 200 cc. in passing through the instrument at the stated temperature, when divided by 51, the time required for 200 cc. of water to flow through the opening at 68 Fahrenheit.

| Engler— | Engler to Saybolt | Engler to Redwood |
|---|---|---|
| 1 | 28.1 | 26.7 |
| 2 | 33.9 | 29.6 |
| 3 | 36.2 | 30.5 |
| 4 | 37.0 | 30.9 |
| 5 | 37.4 | 31.2 |
| 6 | 37.6 | 31.3 |

Use same factor above six.

The Redwood viscosities are direct readings of the number of seconds required for 50 cc. of the oil to flow from the instrument at a stated temperature.

| Redwood— | Redwood to Saybolt | Redwood to Engler |
|---|---|---|
| 30 | 1.06 | 0.0368 |
| 40 | 1.09 | 0.0353 |
| 50 | 1.13 | 0.0344 |
| 80 | 1.18 | 0.0330 |
| 100 | 1.19 | 0.0326 |
| 180 | 1.20 | 0.0320 |

Use same factor for viscosities above 180.

Conversion tables, together with further information concerning viscosities, may be found in Technological Paper No. 112, United States Bureau of Standards.

## FORMATION OF ACID IN LUBRICATING OILS

**Is there any scientific foundation for the statement that all mineral lubricating oils will form some acids when used under the usual conditions that exist in the automobile engine?—B. G. E.**

It has been reported by several investigators that a highly refined lubricating oil in contact with oxygen and especially when heated to temperatures in the neighborhood of 300 Fahrenheit will undergo a change, the ultimate result of which is the production of acid which may be detected by ordinary chemical means.

The theory has been proposed that the first step in the addition of oxygen, derived from the air, to the compounds making up the oil structure is the formation of alcohols. These change into aldehydes, then to ketones, and are finally oxidized to acids.

The presence of water, in addition to some air, always aids in reactions of this kind. Aside from the progressive action which has been outlined, there is another condition which must be considered: this is the presence of sulphur in the original oil. When portions of the oil are decomposed through coming in contact with the hot surfaces of the motor, some of the sulphur combines with oxygen and water to form sulphuric acid.

The danger of serious corrosion of the cylinder walls, rods, and valves, etc., because of the possible acid condition in a used oil, is a better reason for changing the crankcase oil than actual loss of viscosity or the accumulation of particles of carbon.

Acidity may be detected by tasting the small drops which collect on the engine head very soon after it is exposed. The same condition is frequently noticed on spark plugs. The sour taste indicates that acid is present.

## HEAT OF VAPORIZATION AND TROUTON'S RULE

**Will you kindly give me a statement of Trouton's rule and explain how it is used for determining the heat of vaporization?—C. B. G.**

The following is from American Petroleum Refining by Bell:

The heat of vaporization is obtained by using Trouton's rule (the molecular heat of vaporization divided by the absolute boiling point equals a constant, which is about 20), and adding this to the heat required to raise the oil from room temperature, 25 Centigrade, to the boiling point, on the basis of a specific heat of 0.42 to 0.43, which holds for all mineral oils.

Illustrating this from a crude oil having a specific gravity of 0.883; average molecular weight 113; and average boiling point 216 Centigrade.

Trouton's Rule:

$$\frac{\text{Molecular Heat of Vaporization}}{\text{Absolute Boiling Point}} = K = 20$$

$$\text{Heat of Vaporization} = \frac{20 \times \text{Absolute Boiling Point}}{\text{Molecular Weight}}$$

The average boiling point is derived from an average of the initial, final, and each 10 per cent fraction temperatures. This is given as 216 Centigrade, so $216+273=489$ Centigrade on the absolute scale. Then by the last

$$\frac{20 \times 489}{113} = 86.5 \text{ calories.}$$

The value 86.5 calories is the heat required for converting the boiling oil from the liquid state to the vapor state. The number of calories necessary to bring the oil from the room temperature, 25 Centigrade, to the average boiling point of 216 Centigrade, is calculated as follows: The specific heat of the oil is about 0.43, so $(216-25)\times 0.43=82$ calories.

The total heat of vaporization is therefore $86.5+82=168.5$ calories.

## OIL IN PIPE LINES AND STORAGE

**How much oil is there stored in existing pipe lines and in tanks located in the field?—D. H.**

At this time there are over 398,000,000 bbls. of crude oil in storage in the United States. This includes 35,544,000 bbls. in refinery tanks and a relatively small quantity of fuel which is included with the heavy oils of California.

**There are something over 90,000 miles of pipe lines in this country containing in round numbers 17,000,000 bbls. of oil. The total oil in pipe lines and tanks east of California is 242,630,000 bbls.**

# Brief Items for Plant Operators

## ENGINEERS TO MEET IN TULSA, APRIL 7

In connection with the Oil Power Week in which practically all the national engineering societies are taking part, the Mid-Continent Section of the American Society of Mechanical Engineers in collaboration with the American Institute of Mining and Metallurgical Engineers will hold a meeting in the Winter Garden of Hotel Mayo, Tulsa, Okla., April 7. This will be the final meeting of the 1926-27 season.

The meeting will be opened at 1:30 p. m., with the election of officers for the ensuing year and at 2:30 the following papers will be delivered:

1. The Design of Pressure Still Furnaces for Burning Oil and Their Operation—L. A. Mekler, Universal Products Co., Chicago.

2. Fuel Problems for Pipe Line Pumping Stations—S. P. Young, Sinclair Pipe Line Co., Tulsa, Okla.

3. Oil-Burning Railway Locomotive Design and Operation—Robert Collett, St. Louis & San Francisco Railway Co., St. Louis, Mo.

At 6:30 the annual banquet will be held in the Winter Garden at which the principal speaker will be W. L. Abbott of Chicago, past president of the American Society of Mechanical Engineers. Fred Insull, of the Public Service Co. of Oklahoma, will act as toastmaster and short addresses will be made by men prominent locally and in the engineering business. The banquet will be informal and advance tickets may be obtained from A. W. Burkett, 436 Kennedy Building, Tulsa, Okla.

## PETROLEUM SECTION SAFETY CONFERENCE

R. R. Irwin, vice president of the White Eagle Oil & Refining Co., Kansas City, Mo., will preside at the meeting of the Petroleum Section of the National Safety Council to be held at Kansas City, April 14. The meeting of the Petroleum Section is being held in connection with the First Annual Central States Safety Congress, covering 15 states in the Middle West and Southwest.

At the meeting of the Petroleum Section, R. J. Lauder, Roxana Petroleum Corp., St. Louis, Mo., is to talk about "Safety in the Marketing Division." "Safety in the Mid-Continent Field," is the subject of a speech by Ray Miller, Marland Oil Co., Ponca City, Okla. Elmo D. Murphey, Mid-Continent Petroleum Corp., Tulsa, Okla., speaking on "Safety in the Manufacturing Division," concludes the session.

## EAST CHICAGO PLANT BEGINS OPERATIONS

CHICAGO, Mar. 22.—Roxana Petroleum Corp. began operating its East Chicago refinery on a commercial scale today. It is running 1,500 bbls. as a skimming plant, to be gradually increased. Cracking units will not be ready until May 1. The pipe line is now delivering crude to the refinery.

### WEOWNA REFINERY SOLD

The Weowna Refining Co.'s plant at Winnett, Mont., which has been shut down for some time, was sold to creditors last week for $20,075. The refinery was built during the early days of the Cat Creek development and obtained its crude from that field. Later the producers supplying the refinery found they could do better by selling to other buyers and the refinery was shut down.

## SEMINOLE CRUDE IN DEMAND BY REFINERS, OBTAIN HIGH YIELDS

With a production which is averaging more than 300,000 bbls. daily, together with a certainty that it will continue to be a large producer throughout the year, the Seminole Field of Oklahoma is attracting more and more attention from refiners in all parts of the country. The fact that the crude—unlike some of the other new sources of supply of the past two years—is a high gravity product which is relatively easy to refine into marketable products is partially responsible for interest on the part of the plant operators.

At present the field is producing approximately 43 per cent of the Oklahoma production and 24 per cent of the entire output of the Mid-Continent Field. With production on the decline in most of the other fields the Seminole Field has been a "life saver" for several refiners operating in the Mid-Continent who six months ago were faced with a crude shortage.

During the past two weeks it is known that a few refiners with no pipe line connection have become interested in the field with the view of transporting the oil by tank car. Some crude is available in excess of the pipe line capacity of the field and this has been sold at prices at or below the present posted schedules. Unless the production of the field drops it is certain that this tank car movement will increase and thus add to the importance of the field as a factor in the present gasoline market.

### Mid-Continent Refiners

In the Mid-Continent Field the Empire Refineries, Inc. Barnsdall Refineries, Inc., Pierce Petroleum Corp., Mid-Continent Petroleum Corp., Roxana Petroleum Corp., Shaffer Oil & Refining Co., Pure Oil Co., and the Tidal Refining Co. are running Seminole crude to their stills. These companies are among the first 12 refinery organizations in the field.

In addition The Texas Company, Sinclair Refining Co., the Gulf Refining Co. and the Magnolia Petroleum Co. have refineries in the Mid-Continent Field although the bulk of their refinery capacity is located at plants outside that area. These organizations through affiliated companies, along with the Prairie Pipe Line Co. and the Oklahoma Pipe Line Co. are moving large quantities of the Seminole to storage or to refineries located outside the Mid-Continent Field. The Seminole crude actually being refined at Mid-Continent refineries is probably less than 100,000 bbls.

Ultimately the crude will be refined in all the refining areas of the United States with the exception of the Rocky Mountain area and California. The amount used at Mid-Continent refineries will gradually increase and should the production of the field hold up it will furnish a substantial part of the 425,000 bbls. which reperesents the approximate average daily crude run to stills in the Mid-Continent area.

### Distillation Test

The following distillation of a sample of representative Seminole crude was made on a laboratory scale by running 2,000 c.c. in a small pipe still equipped with a small bubble-cap tower designed to be in the same proportion to the still as a commercial installation.

| Gravity of Crude | 41.2 A.P.I. |
|---|---|
| I. P. | 90° Fah. |
| 10 per cent | 190 |
| 20 per cent | 246 |
| 30 per cent | 318 |
| 40 per cent | 400 |
| 50 per cent | 482 |
| 60 per cent | 576 |
| 70 per cent | 586 |

A cut of 350 endpoint gasoline was made that showed the following distillation test when run in the usual manner and was 32 per cent of the crude.

| Gravity of Gasoline | 65.0 A.P.I. |
|---|---|
| I. P. | 108° Fah. |
| 10 per cent | 130 |
| 20 per cent | 146 |
| 30 per cent | 166 |
| 40 per cent | 186 |
| 50 per cent | 204 |
| 60 per cent | 220 |
| 70 per cent | 232 |
| 80 per cent | 272 |
| 90 per cent | 203 |
| E. P. | 350 |

This distillation test indicates that a total of 43 per cent straightrun U. S. Motor gasoline may be made and will meet the 58-60 gravity specification so often demanded without the use of natural gasoline. A relatively high yield of the low endpoint gasolines may be made such as the 375 and 400 endpoint grades and these may be cut so as to be one-third of the total gasoline without seriously altering the quality of the U. S. Motor grade, if natural gasoline is used in the blend. A normal yield of kerosene is shown at 5 per cent with a yield of 30 per cent gas oil when making 18-22 gravity fuel.

The crude will make a desirable lub stock yielding about 3 per cent 200 viscosity oil. The wax content is similar to that of other Mid-Continent crudes suitable for the production of lubricating oils, and will approximate .5 per cent of the crude. There are no particular problems involved in the treating of the products and the operation of the average plant would be affected only by the increased volume of the gasoline and total overhead cut, if a maximum of gasoline is desired.

The gas oil and fuel oil have no bad characteristics for use as cracking stocks and the cold test of 40 to 50 on the 18 degree fuel is not too high for general commercial use.

## AMONG THE TECHNICAL MEN

D. G. Morgan, assistant general superintendent of the West Tulsa, Okla., refinery of the Mid-Continent Petroleum Corp., has had his entire experience in petroleum refining at one plant. He started to work at the West Tulsa refinery in 1917 when the Mid-Continent Petroleum Corp. was known as Cosden & Co., and his connection with the plant has been continuous since that time.

D. G. Morgan

Previously Mr. Morgan attended Ohio State University, specializing in chemistry. He received the degree of Bachelor of Arts and also took postgraduate work at that institution. Following his graduation he was first employed in the laboratories of the Ohio State Board of Health at Columbus, Ohio.

He continued his laboratory work with the Aetna Powder Co. at Gary, Ind., and later was connected with the experimental laboratories of A. and M. College at Stillwater, Okla. While there he carried on research work for the Board of Agriculture of the State of Oklahoma.

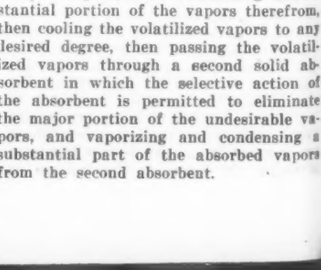
In 1917 he entered the employment of Cosden & Co. His first position with the company was in the testing laboratories of the plant. Two years later he was transferred to the processing department as assistant transfer foreman. Shortly afterward he was made transfer foreman.

Later he was selected as a tutor in a course on refining operations for employes conducted by the company. In 1921 he was appointed assistant process superintendent and in 1922 was placed in charge of that department. He continued in that position until 1925 when he was promoted to assistant general superintendent of the refinery which for several years has been the largest complete plant in the Mid-Continent Field.

# Recent Patents

(Additional Patents on Page 166)

1,616,242. Vapor Recovery. Clyde L. Voress and Nelson C. Turner, Charleston, W. Va., assignors to Gasoline Recovery Corp., a corporation of Delaware. Filed June 14, 1926. Serial No. 115,941. 5 Claims. (Cl. 196—8.)



1. A process for the recovery of a mixture of hydrocarbon vapors of different volatility from gaseous mixtures which consists in contacting the gaseous mixture with a solid absorbent for insufficient time to permit the selective action of the absorbent to displace a large proportion of the more volatile vapors with less volatile vapors, then volatilizing a substantial portion of the vapors therefrom, then cooling the volatilized vapors to any desired degree, then passing the volatilized vapors through a second solid absorbent in which the selective action of the absorbent is permitted to eliminate the major portion of the undesirable vapors, and vaporizing and condensing a substantial part of the absorbed vapors from the second absorbent.

# Oil Securities Heavy But Not Active

## Houston Breaks Below 100. Independent Oil & Gas Issue of $6,500,000 Underwritten

By N. O. Fanning

*New York Bureau, The Oil and Gas Journal, Room 629, No. 101 Park Avenue, New York, N. Y.*

NEW YORK, Mar. 21.—Oil securities were heavy but not particularly active during the past week. Houston oil broke below 100 against its recent high of 124¾. Independent Oil & Gas is the lastest Oil company to announce new financing. A banking syndicate has underwritten an issue of $6,500,000 6½ per cent debentures.

### Gulf Oil Corp.

The report of the Gulf Oil Corp. and subsidiaries for the year ended December 31, 1926, shows net income of $35,098,077 after interest, depreciation, depletion and taxes, equivalent to $7.95 a share (par $25) earned on 4,414,716 shares of stock. This compares with $35,000,761 or $7.97 a share on 4,390,716 shares outstanding in 1925.

The consolidated income account for 1926 compares with 1925 as follows:

| | 1926 | 1925 |
|---|---|---|
| Gross earnings | $254,718,423 | $215,661,867 |
| Operating expenses | 153,837,124 | 127,763,121 |
| Oper. profit | $100,881,299 | $ 87,898,746 |
| Other income | 2,590,617 | *5,106,433 |
| Total income | $103,471,916 | $ 93,005,179 |
| Int., taxes, etc. | 23,080,078 | 21,044,702 |
| †Depr., depl., etc. | 45,293,761 | 36,959,716 |
| Net income | $ 35,098,077 | $ 35,000,761 |
| Dividends | 6,598,270 | 6,554,732 |
| Surplus | $ 28,499,806 | $ 28,446,029 |

†Includes drilling costs, etc. *Includes $2,948,543 appreciation in value of inventories in 1925 and $1,873,820 in 1924.

The consolidated balance sheet of the Gulf Oil Corp. and subsidiaries as of December 31, 1926, compares with 1925 as follows:

| | 1926 | 1925 |
|---|---|---|
| **Assets** | | |
| Plant | $376,036,625 | $319,526,251 |
| Cash | 6,788,447 | 11,956,962 |
| Marketable sec. | 6,106,510 | 1,036,548 |
| Reacquired sec. | 300,000 | 602,386 |
| Other invest. | ..... | 980,827 |
| Notes, accts., receiv. | 17,292,625 | 13,464,406 |
| Inventories | 79,338,319 | 66,919,679 |
| Employes' loans | 8,925,130 | 9,174,112 |
| Deferred charges | 4,549,486 | 3,949,122 |
| Total | $499,337,142 | $427,610,293 |
| **Liabilities** | | |
| Capital stock | $110,367,900 | $109,767,900 |
| Funded debt | 38,904,000 | 42,904,000 |
| Accts. payable | 14,512,230 | 10,762,725 |
| Notes payable | 15,902,101 | 1,861,214 |
| Accrd. liabilities | 1,894,454 | ..... |
| Depr., depl. reserve | 176,838,997 | 148,593,421 |
| Tax reserve, etc. | 5,198,052 | 5,509,385 |
| Deferred credits | 335,513 | 244,534 |
| Minority inst. in subsidiaries | 10,362 | 5,665 |
| Surplus | 135,373,533 | 107,961,449 |
| Total | $499,337,142 | $427,610,293 |

### Prairie Pipe Line

The Prairie Pipe Line Co. has raised the dividend rate from $8 to $10 per share per annum by declaring a dividend of $2.50 payable April 30 to stockholders of record March 31.

### Solar Refining

The Solar Refining Co. for the year ended December 31, 1926, reports net profit of $635,347 after Federal taxes, equal to $15.88 a share on 40,000 shares of stock. This compares with $628,257 of $15.70 a share in 1925.

### Skelly Oil Financing

The Skelly Oil Co. has sold $15,000,000 12-year, 5½ per cent sinking fund debentures. They are being offered for subscription by Taylor, Ewart & Co., Continental & Commercial Co., Halsey, Stuart & Co., and the Union Trust Co., at 98½, to yield about 5.67 per cent.

### Gilliland Oil

The Gilliland Oil Co. stockholders will vote on a plan April 5 to change the capitalization. The authorized number of shares will be changed from 600,000 of no par common and 50,000 shares of $100 par preferred to 248,289 no par common shares. Holder of each share of present preferred is entitled to receive in exchange one share of new common, two-thirds of which will represent the share of preferred and one-third the accrued dividends. Holders of each share of common is entitled to one-eighteenth share of new common.

Stockholders will vote also on the authorization and issuance of $3,500,000 of 6½ per cent 10-year first mortgage bonds, with warrants representing the right to purchase at $30 per share 63.333 shares of new common over a period of five years. Net proceeds from the bond issue will approximate $3,150,000 and will be used to retire present funded debt.

The plan also provides for the sale of up to 50,000 shares of new common at $22.50 a share to a syndicate, with three-year option to buy 50,000 additional shares at the same price.

It is proposed that the capital be reduced to $1,500,000. To effect such reduction, 10,289 shares of new common stock, which will be owned by the corporation if the plan is approved, will be retired and the remaining stock outstanding will be reduced to the capital value of $1,500,000.

It is also proposed that a new general manager be given an option to purchase 7,500 shares of new common stock at $22.50 per share.

### H. L. Doherty's Health

In a letter to stockholders, Henry L. Doherty, president of Cities Service Co., denied that the company was a "one-man" concern. He said he had not taken part in the routine work since the United States entered the World War and never expects again to take an active part in the routine work. He said the business was so well organized it would go on perfectly without him. In regard to his health, which had been used as an excuse for a bear raid on the stock recently, Mr. Doherty admitted he was sick and had been sick and unable to attend to business in the ordinary way, but he was better now and he had not been seriously ill. He also said his business affairs were provided for by will and by provision for trustees, and there was no reason why anything happening to him should intrinsically affect the value of Cities Service stock.

### Ohio Oil

The report of the Ohio Oil Co. for the year ended December 31, 1926, shows net income of $13,536,904, after charges and Federal taxes, equal to $5.64 a share (par $25) earned on 2,400,000 shares of stock, comparing with $9,383,253, or $3.91 a share, in 1925.

The consolidated income account for 1926 compares with 1925 as follows:

| | 1926 | 1925 |
|---|---|---|
| Net earnings | $17,094,548 | $11,190,027 |
| Federal taxes | 3,557,644 | 1,806,774 |
| Net income | $13,536,904 | $ 9,383,253 |
| Dividends | 8,377,086 | 6,000,000 |
| Surplus | $ 5,159,818 | $ 3,383,253 |

The consolidated balance sheet of the Ohio Oil Co. as of December 31, 1926, compares with 1925 as follows:

| | 1926 | 1925 |
|---|---|---|
| **Assets** | | |
| Plant | $ 29,230,258 | $ 30,015,540 |
| Cash | 1,552,840 | 1,873,824 |
| Notes and accts. receivable | 4,102,004 | 3,422,235 |
| Inventories | 33,867,609 | 30,493,443 |
| Investments | 36,382,079 | 33,863,895 |
| Unadj. debits | 2,535,146 | 209,073 |
| Total | $107,669,939 | $ 99,878,010 |
| **Liabilities** | | |
| *Capital stock | $ 60,000,000 | $ 60,000,000 |
| Funded debt | 267,000 | 267,000 |
| Notes and accts. payable | 1,317,707 | 903,072 |
| Unadj. credits | 264,244 | 474,829 |
| Reserves | 4,425,086 | 1,806,774 |
| Minority inst. in subsidiaries | 350,468 | 548,766 |
| Surplus | 41,045,431 | 35,877,569 |
| Total | $107,669,936 | $ 99,878,010 |

*Par $25.

### National Transit Co.

Net income of $640,466.38 is reported by the National Transit Co. in its statement of income account for 1926. The pipe line department reported a loss of $48,309.96. Profit from the gathering department amounted to $136,659.05, while the loss of the trunk line department was $180,665.20. Nonoperating income was $727,585, mainly dividends and interest.

**General Balance Sheet as of December 31, 1926**

| | |
|---|---|
| **Assets** | |
| Fixed assets | |
| Plant and equipment | $ 7,493,795.07 |
| Less deprec., reserve | 8,445,422.03 |
| | 5,434,364.61 |
| | $ 3,011,057.42 |
| Invests. in subs. | 4,482,737.65 |
| Investments (res. funds) | 5,787,855.70 |
| Current assets | 768,423.95 |
| Cash | 580,066.77 |
| Accts. receivable | 188,357.18 |
| Deferred assets and unadjusted debits | 18,194.39 |
| | $14,068,269.11 |
| **Liabilities** | |
| Capital stock | $ 6,362,500.00 |
| Current liabilities | 62,584.60 |
| Accounts payable | 62,584.60 |
| Unadjusted credits | 2,845,745.24 |
| Tax liability | $ 1,153,743.83 |
| Ins., annuity, cash reserves | 1,468,589.63 |
| Operating reserves | 164,108.06 |
| Other unadjusted credits | 59,303.72 |
| Corporate surplus | 4,797,439.27 |
| Appropriated | $ 4,768,644.20 |
| Unappropriated | 28,795.07 |
| | $14,068,269.11 |

**Income Account for the Year 1926**

| | | |
|---|---|---|
| Operating income | R | $ 48,309.96 |
| Gathering department | R | $136,659.05 |
| Trunk line department | R | 180,665.20 |
| Miscellaneous | R | 4,303.81 |
| Nonoperating income | | 727,585.00 |
| Div. from subsidiaries | | 426,250.00 |
| Other div. and inst. | | 288,800.39 |
| Miscellaneous | | 12,534.61 |
| Gross income | | $679,275.04 |
| Deduc. from gross income | | 56,827.51 |
| Rents, misc., taxes, etc. | | 56,827.51 |
| | | $622,447.53 |
| Profit and loss direct items | | 18,018.85 |
| Net income, all sources | | $640,466.38 |
| Dividend appropriations | | $572,633.94 |
| Miscl. appropriations | | 1,022.50 |
| Appro. for add. to plant | | 59,590.23 |
| To profit and loss (unapprop'ted) | | 7,219.71 |
| Total | | $640,466.38 |

### NEW YORK STOCK EXCHANGE—LIST OF ACTIVE STOCKS

| Stocks— | Par | Close Quot. Mar. 21 | Close Quot. Mar. 14 | 1927 High | 1927 Low | 1926 High | 1926 Low | 1925 High | 1925 Low |
|---|---|---|---|---|---|---|---|---|---|
| Amerada Corp. | .. | 31¼ | 31⅝ | 37⅝ | 31½ | 32⅞ | 24⅜ | .. | .. |
| Atlantic Ref., com. | 100 | 108½ | 115⅝ | 117⅝ | 107 | 128⅝ | 97 | 117½ | 95¼ |
| Barnsdall "A" | 25 | 30¼ | 32¾ | 35½ | 27 | 32½ | 23½ | 33½ | 18⅜ |
| California Pet., com. | 25 | 28 | 29½ | 32⅜ | 29¼ | 38⅛ | 30⅞ | 34⅝ | 23⅜ |
| Houston Oil | 100 | 102⅜ | 119 | 124⅜ | 60¼ | 75 | 50¼ | 85 | 59 |
| Independent Oil & Gas | .. | 25⅜ | 26 | 32⅜ | 27⅝ | 34 | 20¼ | 41⅜ | 13½ |
| Louisiana Oil | 10 | 13⅜ | 14⅝ | 18¼ | 15 | 19½ | 12 | 23⅜ | 13⅜ |
| Maracaibo | .. | • 19 | 19 | 22⅜ | 18 | 27⅜ | 18⅜ | 35½ | 20⅜ |
| Marland | .. | 50⅞ | 53¼ | 58½ | 52⅜ | 63⅝ | 49¼ | 60⅛ | 32⅝ |
| Mid-Continent Pet. | .. | 34⅜ | 36½ | 39⅜ | 34⅜ | 41 | 25⅜ | 38 | 25⅜ |
| National Supply | 50 | 90 | 92 | 95⅜ | 82½ | 84⅞ | 55⅛ | 71 | 54⅜ |
| Oil Well Supply | 25 | 32⅜ | 34 | 40⅜ | 31¼ | 36 | 30 | 38 | 33⅜ |
| Pan. Amer., B | 50 | 61⅜ | 62 | 65⅞ | 60⅜ | 72⅜ | 56¼ | 83⅜ | 59½ |
| Pan. Amer., Western B | .. | 29 | 30½ | 37⅜ | 30½ | 46 | 34 | 94⅜ | 37⅜ |
| Phillips Pet. | .. | 50⅜ | 53⅜ | 60¼ | 54⅜ | 54⅞ | 42¼ | 47⅛ | 36¼ |
| Producers & Refiners | 50 | 24 | 23⅞ | 32 | 16⅜ | 26 | 11 | 32⅝ | 12½ |
| Pure Oil, com. | .. | 29 | 30½ | 32⅝ | 27¼ | 31 | 25⅜ | 33⅜ | 25½ |
| Royal Dutch, N. Y., sh. | 13.40 | 50 | 51⅜ | 54½ | 50½ | 57⅜ | 49⅜ | 57⅜ | 48¼ |
| Shell Transport | 10 | • 46 | • 46 | 49 | 45 | 48⅜ | 42 | 49 | 39⅜ |
| Shell Union, com. | .. | 29¼ | 29⅜ | 31⅜ | 28⅜ | 30⅞ | 24 | 28⅜ | 21⅝ |
| Simms Pet. | 10 | 19¼ | 20¼ | 22⅜ | 19 | 28⅜ | 16½ | 28½ | 17⅜ |
| Sinclair Consolidated | .. | 17⅜ | 19 | 22⅜ | 17⅝ | 24⅞ | 16⅜ | 24⅞ | 17 |
| Skelly Oil | 25 | 31¼ | 32¼ | 37⅜ | 34¼ | 37½ | 27 | 32½ | 21⅜ |
| Standard of Calif. | 25 | 56 | 57 | 60⅜ | 57¼ | 63½ | 54 | 67½ | 52½ |
| Standard of N. J., com. | 25 | 37¼ | 37⅝ | 41⅜ | 37¼ | 46⅜ | 37½ | 47½ | 38⅜ |
| Standard of N. Y. | 25 | 31⅞ | 31½ | 34¼ | 57¼ | 47¼ | 30⅝ | 48⅝ | 40 |
| Sun Oil Co. | .. | 30 | 31 | 34⅜ | 32 | 41⅜ | 30⅜ | 43⅜ | 28½ |
| The Texas Company | 25 | 48⅛ | 48⅝ | 58 | 55½ | 58 | 48 | 55 | 42⅜ |
| Tex. Pac. Coal & Oil | 10 | 13¼ | 13⅜ | 16⅜ | 14⅛ | 19⅛ | 12½ | 23⅜ | 11 |
| Tide Water Oil | 25 | • 26 | • 27 | 29⅛ | 27 | 39¼ | 27 | .. | .. |
| Transcontinental | .. | 4⅝ | 4⅝ | 5 | 4⅛ | 5⅝ | 3 | 5⅝ | 3⅛ |
| Union Oil of Calif. | 25 | 44⅛ | 48⅜ | 56½ | 48⅜ | 58⅝ | 37¼ | 43⅜ | 33⅜ |
| Union Tank, com. | 100 | 99¾ | 100 | 98 | 95 | 120⅜ | 84¼ | ‡134 | 118 |
| White Eagle O. & R. | .. | 25¼ | 25⅜ | 27½ | 25⅜ | 29⅝ | 25½ | 21⅜ | 25⅝ |
| **Standard Oils** | | | | | | | | | |
| Anglo-Amer. Oil | £1 | • 19 | • 20 | 21⅝ | 19⅞ | 19⅜ | 16½ | 26⅜ | 17½ |
| Borne Scrymser | 25 | • 55 | 60¼ | 69 | 63 | 75 | 65 | ‡240 | 205 |
| Buckeye Pipe Line | 50 | 47 | 47 | 48½ | 45 | 59¼ | 47⅝ | 72 | 63½ |
| Chesebrough Mfg. Co. | 25 | • 79 | • 79¼ | 82 | 76½ | 81⅛ | 63 | 74 | 48¼ |
| Continental | 10 | 19⅝ | 20 | 22⅝ | 22 | 25⅞ | 19¼ | 31⅛ | 21⅞ |
| Cumberland Pipe Line | 100 | 89 | *126 | 137 | 106 | 137 | 102 | 156 | 128 |
| Eureka Pipe Line | 100 | • 49 | • 49 | 51¼ | 47 | 53⅜ | 43 | 96 | 61¼ |
| Galena Signal, com. | 100 | • 10½ | • 11 | 13½ | 10¼ | 32½ | 9⅞ | 68½ | 23½ |
| Humble O. & R. Co. | 25 | 59 | 56 | 62⅜ | 57⅜ | 68⅛ | 52 | 99 | 42½ |
| Illinois Pipe Line | 100 | 139½ | 137¼ | 140½ | 123⅜ | 144 | 131 | 154½ | 124 |
| International Pet. Co. | 10 | 30⅝ | 31⅝ | 34⅞ | 31⅜ | 35¼ | 28⅜ | 25⅜ | 22⅛ |
| Ind. Pipe Line | 50 | 64½ | • 64½ | 69½ | 61 | 68 | 52¼ | 84 | 87½ |
| International Pet. Co. | 10 | 30⅝ | 31⅝ | 34⅞ | 31⅜ | 35¼ | 28⅜ | 25⅜ | 22⅛ |
| Nat'l Transit Co. | 12.50 | 13⅜ | 14¼ | 14 | 13⅜ | 20⅜ | 27¼ | 25½ | 16⅛ |
| New York Transit | 100 | • 32 | • 33 | 36 | 31¼ | 51½ | 27¼ | 79 | 50 |
| Northern Pipe Line | 100 | • 78 | • 78½ | 79¼ | 70 | 80⅝ | 64 | 88 | 67½ |
| Ohio Oil Co. | 25 | 48⅝ | 58½ | 64¼ | 59⅞ | 67⅝ | 55⅜ | 75¼ | 60 |
| Penn-Mex Fuel | 25 | • 16⅛ | 16½ | 19 | 16½ | 24⅛ | 15 | 44 | 19 |
| Prairie Oil & Gas | 25 | 48⅝ | 50⅜ | 56½ | 52 | 60¼ | 48 | 65½ | 45⅜ |
| Prairie Pipe Line | 100 | 148 | 149½ | 151 | 122 | 137½ | 122½ | 129⅜ | 105 |
| Solar Refining Co. | 100 | 186 | 190 | 201½ | 194 | 212 | 184½ | 259 | 200 |
| So. Penn Oil | 25 | 35⅛ | 36½ | 41½ | 38 | 50 | 35 | ‡197 | 139 |
| S. W. Pa. Line | 100 | • 57½ | • 57 | 58 | 55½ | 56 | 47½ | 84 | 50 |
| Southern Pipe Line | 50 | • 15⅜ | • 16 | 27⅛ | 24 | 27 | 24 | ‡103 | 63 |
| Standard of Indiana | 25 | 67½ | 67⅛ | 74⅛ | 67¼ | 70½ | 61⅝ | 70⅜ | 69½ |
| Standard of Kansas | 25 | 16½ | 17½ | 20⅜ | 19 | 36½ | 16½ | 46 | 30¼ |
| Standard of Kentucky | 25 | 114⅞ | 116 | 122¼ | 119 | 134⅜ | 108 | 137 | 114⅜ |
| Standard of Nebraska | 25 | 47 | 48 | 49½ | 46¾ | 51⅛ | 42 | ‡270 | 231 |
| Standard of Ohio, com. | 100 | *317½ | 318 | 254 | 335 | 362 | 192½ | 369 | 338 |
| Swan & Finch, com. | 25 | • 15⅜ | • 16 | 16 | 15 | 21 | 18 | 27 | 12 |
| Vacuum Oil | 25 | 105¼ | 106 | 110½ | 95⅝ | 109⅜ | 94⅛ | 109½ | 80½ |
| **Miscellaneous** | | | | | | | | | |
| Gulf Oil Corp of Pa. | 25 | 92¾ | 93 | 96½ | 92¼ | 95 | 82⅛ | 98¼ | 63½ |
| Tidewater Associated | .. | 18⅝ | • 19⅛ | 23⅛ | 17½ | 27 | 21 | .. | .. |

*Bid, no sales. ‡Old stock. †New stock.

The Oil and Gas Journal's weekly average price of 20 representative petroleum stocks listed on the New York Stock Exchange was as follows:

| | | | | | |
|---|---|---|---|---|---|
| Mar. 21 | 58.43 | Feb. 14 | 61.13 | Jan. 10 | 59.42 |
| Mar. 14 | 59.26 | Feb. 7 | 60.51 | Jan. 3 | 58.94 |
| Mar. 7 | 59.34 | Jan. 31 | 60.09 | Dec. 27 | 60.22 |
| Feb. 26 | 60.83 | Jan. 24 | 59.89 | Dec. 20 | 59.19 |
| Feb. 21 | 60.26 | Jan. 17 | 60.38 | Dec. 13 | 57.90 |

# REFINERY AND CRUDE PRICES

**Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields**

## GASOLINE AND NAPHTHA

| | Mar. 22 | | Mar. 15 | | Mar. 8 | |
|---|---|---|---|---|---|---|
| **OKLAHOMA (Group 3)—** | | | | | | |
| 50-52 450 end point (Naphtha) | .06¼ | .06½ | .06¾ | | .07¼ | .07½ |
| 56-58 450 end point | .06 | .06¼ | .06½ | .06¾ | .07 | |
| 58-60 450 end point | .06 | .06¼ | .06½ | .06¾ | .07 | .07⅛ |
| 58-60 450 end point | .06 | .06¼ | .06½ | .06¾ | .07 | .07⅛ |
| 58-60 437 end point (U. S. Motor) | .06¼ | .06¾ | .06¾ | .07 | .07¼ | .07½ |
| 60-62 400 end point | .07 | .07¼ | .07½ | .07⅞ | .08 | .08¼ |
| 64-66 375 end point | .07¼ | .07½ | .08¼ | .08½ | .08¾ | .09 |
| 68-70 360 end point | .07¾ | .08 | .08¾ | .09 | .09½ | .09¾ |
| 64-66 437 end point (blend) | .06 | .06¼ | .06½ | .07 | .07¼ | .07½ |
| **KANSAS—** | | | | | | |
| 58-60 437 end point (U. S. Motor) | .06½ | .07 | .07 | .07¼ | .07½ | .07⅝ |
| **NORTH TEXAS—** | | | | | | |
| 48 50 450 end point (Naphtha) | .06¼ | | .06½ | .06¾ | .07 | .07¼ |
| 56-58 450 end point | .06 | .06¼ | .06¾ | .07 | .07 | .07¼ |
| 58-60 437 end point (U. S. Motor) | .06¼ | .06½ | .06¾ | .07 | .07⅛ | .07⅜ |
| 60-62 400 end point | .06½ | .06¾ | .07½ | .07¾ | .08 | .08⅛ |
| 64-66 390 end point | .06¾ | .07 | .08 | .08¼ | .08½ | .08⅝ |
| 64-66 375 end point | .07 | .07¼ | .08¼ | .08½ | .08⅝ | .09 |
| 68-70 360 end point | .07¾ | .08 | .08¾ | .09 | .09½ | |
| 64-66 437 end point (blend) | .06 | | .06½ | .06⅜ | .07¼ | .07½ |
| **NORTH LOUISIANA—** | | | | | | |
| 58-60 437 end point (U. S. Motor) | .06½ | .06¾ | .07 | .07¼ | .07½ | .07¾ |
| **ARKANSAS—** | | | | | | |
| 58-60 437 end point (U. S. Motor) | .06½ | .06¾ | .07 | .07¼ | .07½ | .07¾ |
| **PENNSYLVANIA—** | | | | | | |
| 52-54 Naphtha | .09½ | .09¾ | .10¼ | .10½ | .11 | .11¼ |
| 54-56 Naphtha | .09½ | .09¾ | .10½ | .10¾ | .11 | .11½ |
| 58-60 Gasoline | .09 | .09¼ | .10½ | .10¾ | .11¼ | .11½ |
| 60 Gasoline | .10 | .10¼ | .11¼ | .11½ | .12¼ | .12½ |
| 62 Gasoline | .10¼ | .10½ | .11½ | .11¾ | .12¾ | .13 |
| 64 Gasoline | .10¾ | .11 | .12 | .12¼ | .13 | .13¼ |
| **CALIFORNIA—** | | | | | | |
| 58 60 437 end point (U. S. Motor) domestic | .09 | .10 | .10 | .10½ | .10½ | .11 |
| **CHICAGO DISTRICT (Based on Group 3)—** | | | | | | |
| 50-52 450 end point (Naphtha) | .06½ | .06¾ | .07 | .07¼ | .07½ | |
| 56-58 450 end point | .06½ | | .06¾ | | .07 | .07¼ |
| 58-60 437 end point (U. S. Motor) | .06½ | .06¾ | .06¾ | .07 | .07¼ | .07½ |
| 60-62 400 end point | .07 | .07¼ | .07¾ | .08 | .08 | .08¼ |
| 64-66 375 end point | .07½ | | .08¼ | .08½ | .08¾ | .09 |
| 68-70 360 end point | .07¾ | .08 | .08¾ | .09 | .09½ | .09¾ |
| 64-66 437 end point (blend) | .06¼ | .07 | .06½ | .07 | .07¼ | .07½ |

## NATURAL GASOLINE

| | Mar. 22 | | Mar. 15 | | Mar. 8 | |
|---|---|---|---|---|---|---|
| **OKLAHOMA (Group 3)—** | | | | | | |
| Grade AA, 80-87.9, 375 e.p., rec. 90% | .04½ | .04¾ | .04¾ | | .05¼ | .05½ |
| Grade A, 72-79, 375 e.p., rec. 90% | .05 | .05¼ | .05¼ | .05½ | .06¼ | |
| Grade BB, 84-92, 375 e.p., rec. 85% | .04 | | .04 | | .04¾ | .05 |
| Grade B, 76-83.9, 375 e.p., rec. 85% | .04¼ | | .04½ | | .05 | |
| Grade C, 80-90, 375 e.p., rec. 78% | .03½ | .03¾ | .03¾ | .04 | .04¼ | |
| **NORTH TEXAS—** | | | | | | |
| Grade AA, 80-87.9, 375 e.p., rec. 90% | .04½ | .04¾ | .04¾ | | .05¼ | .05½ |
| Grade A, 72-79.9, 375 e. p., rec. 90% | .05 | .05¼ | .05¼ | .05½ | .06¼ | |
| Grade BB, 84-92, 375 e.p., rec. 85% | .04 | .04¼ | .04 | .04¼ | .04¾ | .05 |
| Grade B, 76-83.9, 375 e.p., rec. 85% | .04¼ | .04½ | .04½ | | .05 | .05¼ |
| Grade C, 80-90, 375 e.p., rec. 78% | .03¾ | .04 | .04 | | .04¼ | .04½ |
| **NORTH LOUISIANA—** | | | | | | |
| Grade A, 72-79.9, 375 e.p., rec. 90% | .05¾ | .06¼ | .06 | .06½ | .06½ | .06¾ |
| Grade B, 76-83.9 e.p., rec. 85% | .05½ | .05¾ | .05½ | .05¾ | .05⅞ | .06 |
| Grade C, 80-90, 375 e.p., rec. 78% | .04¾ | .05 | .05 | .05¼ | .05½ | .05¾ |
| **CALIFORNIA—** | | | | | | |
| 75-86, 375 390 end point | .11 | .12½ | .11½ | .13 | .12½ | .13½ |
| **CHICAGO DISTRICT (Based on Group 3)—** | | | | | | |
| Grade AA, 80-87.9, 375 e.p., rec. 90% | .04¾ | | .04¾ | .05 | .05½ | .05¾ |
| Grade A, 72-79.9, 375 e.p., rec. 90% | .05 | .05¼ | .05¼ | .05½ | .06¼ | .06½ |
| Grade BB, 84-92, 375 e.p., rec. 85% | .04 | | .04¼ | .04½ | .05 | .05¼ |
| Grade B, 76-83.9, 375 e.p., rec. 85% | .04½ | | | .04½ | .05¼ | .05½ |
| Grade C, 80-90, 375 e.p., rec. 78% | .03½ | .03¾ | | .04 | .04½ | .05 |

## BURNING OIL

| | Mar. 22 | | Mar. 15 | | Mar. 8 | |
|---|---|---|---|---|---|---|
| **KANSAS—** | | | | | | |
| 41-43 water white Kerosene | .05¼ | .05½ | .06 | .06¼ | .06⅜ | .06⅜ |
| **OKLAHOMA (Group 3)—** | | | | | | |
| 41-43 water white Kerosene | .04¾ | .05 | .05¼ | .05½ | .05¾ | |
| 42-44 water white Kerosene | .05¼ | .05½ | .05¾ | .06 | .06¼ | .06½ |
| **NORTH LOUISIANA—** | | | | | | |
| 41-43 prime white Kerosene | .05¼ | .05½ | .05¾ | | .06 | .06⅛ |
| **NORTH TEXAS—** | | | | | | |
| 41-43 water white Kerosene | .04¼ | .04½ | .05 | .04¼ | .05½ | .05¾ |
| **ARKANSAS—** | | | | | | |
| 41-43 water white Kerosene | .05 | .05¼ | .05¾ | | .06 | .06¼ |
| **PENNSYLVANIA—** | | | | | | |
| 43 Kerosene prime white | .06½ | .06¾ | .06¾ | .07 | .07 | .07¼ |
| 45 Kerosene water white | .06¾ | .07 | .07 | .07¼ | .07¼ | .07½ |
| 46 Kerosene water white | .07¼ | .07½ | .07¾ | .08 | .08 | .08¼ |
| 47 Kerosene water white | .08 | .08¼ | .08¼ | .08½ | .08½ | .08¾ |
| 300 Mineral Seal | .08⅜ | .08½ | .08½ | .08⅝ | .08½ | .08¾ |
| **CALIFORNIA—** | | | | | | |
| 38-40 water white (high burning test) | .07 | .07½ | .07 | .07½ | .07 | .07½ |
| Engine distillate, 43-45, 445 end point | .07 | .07½ | .07¼ | .07¾ | .07¾ | .08 |
| Engine distillate, 42-44, 480 end point | .06¾ | .07¼ | .07 | .07½ | .07¼ | .07½ |
| **CHICAGO DISTRICT (Based on Group 3)—** | | | | | | |
| 41-43 water white Kerosene | .05 | .05¼ | .05½ | | .06 | .06⅛ |
| 42-44 water white Kerosene | .05¾ | .06 | .06 | .06¼ | .06½ | |

## FUEL OILS

| | Mar.22 | | Mar. 15 | | Mar. 8 | |
|---|---|---|---|---|---|---|
| **KANSAS—** | | | | | | |
| 24-26 Fuel Oil | 1.37½ | 1.40 | 1.40 | 1.45 | 1.45 | 1.50 |
| 32-36 Gas Oil | .03⅝ | .03⅞ | .04 | .04¼ | .04¼ | .04½ |
| 38-40 Distillate | .04½ | .04¾ | .04¾ | .05 | .05 | .05¼ |
| **OKLAHOMA (Group 3)—** | | | | | | |
| Below 22 Fuel Oil (sellers' cars) | 1.10 | 1.12½ | 1.12½ | 1.15 | 1.15 | 1.20 |
| 22-26 Fuel Oil (sellers' cars) | 1.12½ | 1.15 | 1.17½ | 1.20 | 1.20 | 1.25 |
| 24-26 Fuel Oil (sellers' cars) | 1.17½ | 1.20 | 1.22½ | 1.25 | 1.25 | 1.30 |
| 26-30 Fuel Oil (sellers' cars) | 1.20 | 1.22½ | 1.27½ | 1.30 | 1.30 | 1.35 |
| 28-30 Fuel Oil (sellers' cars) | 1.30 | 1.35 | 1.40 | 1.45 | 1.45 | 1.50 |
| 32-36 Gas Oil (dark) | | .03⅜ | | .03¾ | .04 | .04⅜ |
| 32-36 Gas Oil (straw overhead) | .03⅜ | .03¾ | .03¾ | .04 | .04¼ | .04⅜ |
| 36-38 Distillate | .03½ | .03¾ | .04 | .04¼ | .04¼ | .04½ |
| 38-40 Straw Distillate | .03¾ | .03⅞ | .04¼ | .04⅜ | .04⅜ | .04½ |
| **NORTH TEXAS—** | | | | | | |
| 24-26 Fuel Oil (sellers' cars) | 1.30 | 1.35 | 1.50 | 1.55 | 1.55 | |
| 32-36 Gas Oil (straw) | .03½ | .03¾ | .03¾ | .04 | .03⅞ | .04 |
| 38-40 Straw Distillate | .03⅞ | .04⅛ | .04¼ | | .04¼ | .04⅜ |
| **NORTH LOUISIANA—** | | | | | | |
| 18-20 Fuel Oil | 1.20 | 1.25 | 1.25 | | 1.25 | 1.30 |
| 32-36 Gas Oil | .03⅜ | .03¾ | .03¾ | .04 | .04¼ | .04½ |
| **ARKANSAS—** | | | | | | |
| 36-38 Distillate | .04⅛ | .04¼ | .04¼ | .04⅜ | .04⅜ | .04½ |
| 32-36 Gas Oil (straw) | .04 | .04⅛ | .04⅛ | .04¼ | .04¼ | .04½ |
| 16-20 Refinery Fuel Oil | 1.20 | 1.22½ | 1.20 | 1.22½ | 1.22½ | 1.25 |
| **GULF COAST (South Texas)—** | | | | | | |
| Gas Oil | .05⅛ | .05¼ | .05⅛ | .05¼ | .05½ | .05⅝ |
| Fuel Oil | 1.60 | 1.65 | 1.60 | 1.65 | 1.75 | |
| **PENNSYLVANIA—** | | | | | | |
| 30-34 Fuel Oil | .05⅞ | .06 | .05⅞ | .06 | .05⅞ | .06 |
| 36-40 Fuel Oil | .06⅛ | .06¼ | .06¼ | .06⅜ | .06¼ | .06⅜ |
| **CALIFORNIA—** | | | | | | |
| 33-36 Distillate | .04 | .04¾ | .04 | .04¾ | .04 | .04¾ |
| 27-32 Distillate | .03½ | .04 | .03½ | .04 | .03½ | .04 |
| *15-20 Fuel Oil, Bunkers (at tide water) | .92½ | 1.04 | .92½ | 1.04 | .92½ | 1.04 |
| 15-20 Fuel Oil (cargo lots) | .79 | .87½ | .79 | .87½ | .82½ | .87½ |
| 27 plus Diesel | 1.15 | 1.19 | 1.15 | 1.19 | 1.15 | 1.19 |
| **CHICAGO DISTRICT (Based on Group 3)—** | | | | | | |
| 24-26 Fuel Oil (sellers' cars) Group 3 | 1.20 | 1.25 | 1.25 | | 1.25 | 1.30 |
| 22-26 Fuel Oil (sellers' cars) Group 3 | 1.17½ | 1.20 | 1.20 | 1.22½ | 1.20 | 1.25 |
| 18-22 (Group 3) | 1.15 | 1.17½ | 1.17½ | 1.20 | 1.20 | |
| 16-20 (Smackover) | 1.20 | 1.25 | 1.25 | | 1.25 | 1.30 |
| 32-36 Gas Oil (zero) | .03¾ | .04 | .04 | .04⅛ | .04¼ | .04⅝ |
| 32-36 Gas Oil (industrial) | .03½ | .03¾ | .03¾ | .04 | .04 | .04¼ |
| 36-38 Distillate | .03¾ | .04 | .04 | .04¼ | .04½ | .04⅝ |
| 38-40 Straw Distillate | .04 | .04⅛ | .04¼ | .04½ | .04½ | .04⅝ |

*Bunkers

## LUBRICATING OIL AND WAX

| | Mar. 22 | | Mar. 15 | | Mar. 8 | |
|---|---|---|---|---|---|---|
| **OKLAHOMA (Group 3)—** | | | | | | |
| 100 vis., 2 color, 20 25 cold test | .06¾ | .07 | .06¾ | .07 | .06¾ | .07 |
| 100 vis., 3 color, 20-25 cold test | .06½ | .07 | .06½ | .07 | .06½ | .07 |
| 150 vis., 3 color, 20-25 cold test | .08½ | .09 | .08½ | .09 | .09½ | .10 |
| 150 vis., 4 color, 20-25 cold test | .08¼ | .08¾ | .08¼ | .08¾ | .09½ | .09¾ |
| 180 vis., 3 color, 23-28 cold test | .09½ | .10 | .09½ | .10 | .10 | .11 |
| 180 vis., 4 color, 23-28 cold test | .09¾ | .10 | .09¾ | .10 | .10 | .10½ |
| 180 vis., 5 color, 23-28 cold test | .09½ | .10 | .09½ | .10 | .09¾ | .10¼ |
| 200 vis., 3 color, 23-28 cold test | .10½ | .11 | .10½ | .11 | .10¾ | .11¾ |
| 200 vis., 4 color, 23-28 cold test | .10¼ | .10¾ | .10¼ | .10¾ | .11 | .11½ |
| 200 vis., 5 color, 23-28 cold test | .10½ | .11 | .10¼ | .11 | .10½ | .11¼ |
| 240 vis., 3 color, 25-30 cold test | .13¼ | .14 | .13¼ | .14 | .14 | .15 |
| 240 vis., 4 color, 25-30 cold test | .13½ | .14 | .13½ | .14 | .14 | .14½ |
| 240 vis., 5 color, 25-30 cold test | .12½ | .13 | .12½ | .13 | .13 | .14 |
| 280 vis., 3 color, 25-30 cold test | .16½ | .17 | .16½ | .17 | .16 | .17 |
| 280 vis., 4 color, 25-30 cold test | .15¼ | .15½ | .15¼ | .15½ | .15½ | .16½ |
| 280 vis., 5 color, 25-30 cold test | .14½ | .15 | .14½ | .15 | .15 | .16 |
| Cylinder Stocks: | | | | | | |
| 600, steam refined, light green | .07½ | .10 | .07½ | .10 | .08½ | .11 |
| 600, steam refined, dark green | .05 | .06 | .05 | .06 | .06 | .07 |
| 190-200 vis. @ 210 Bright Stock | .31 | .33 | .31 | .33 | .31 | .35 |
| 150-160 vis. @ 210 Bright Stock | .26 | | .26 | | .27 | |
| Waxes: | | | | | | |
| 124-126 White Crude Scale Wax | .03¾ | .04 | .04 | .04⅛ | .04 | .04¼ |
| **PENNSYLVANIA—** | | | | | | |
| 34 Neutral | .07½ | .07¾ | .07¼ | .07½ | .07½ | .07¾ |
| 34 Sundebloom Neutral | .08½ | .08¾ | .08½ | .08¾ | .08¼ | .08¾ |
| 36 Miners' Neutral | .07¼ | .07½ | .07¼ | .07½ | .07¼ | .07½ |
| 150, 3 color | .28¼ | .28½ | .28¼ | .28½ | .28¼ | .28½ |
| 180, 3 color | .29¾ | .30 | .29¼ | .30 | .29¾ | .30 |
| 200, 3 color | .22½ | .33 | .32¼ | .32¾ | .32½ | .32¾ |
| 220, 3 color | .34¼ | .34½ | .34¼ | .34½ | .34¼ | .34½ |
| 600, steam refined | .10¼ | .10½ | .11¼ | .11½ | .11¼ | .11½ |
| 635, steam refined | .12¼ | .12½ | .14¼ | .14½ | .14¼ | .14½ |
| 650, steam refined | .13¼ | .13½ | .15½ | .15¾ | .15½ | .15¾ |
| 600, Pennsylvania flash | .18 | .18½ | .19½ | .20 | .19½ | .20 |
| 630, Pennsylvania flash | .28½ | .29 | .29½ | .30 | .29¾ | .30 |
| *550, E filtered | .19½ | .20 | .18¼ | .18½ | .18¼ | .18½ |
| *600, E filtered | .20 | .20¼ | .20 | .20¼ | .20 | .20¼ |
| 600, E filtered | .18¼ | .18½ | .18¼ | .18½ | .18 | .18½ |
| 600, D filtered | .25¼ | .25¾ | .25¼ | .25¾ | .25½ | .25¾ |
| 550, E filtered | .17½ | .18 | .17½ | .18 | .17½ | .18 |
| 550, D filtered | .21½ | .22 | .21½ | .22 | .21½ | .22 |
| Pennsylvania Bright Stock | .35½ | .36 | .36 | .36½ | .37 | |
| 122-124 White Crude Scale Wax | .03¾ | .04 | .04¼ | .04⅜ | .04¼ | .04⅜ |
| †124-126 White Crude Scale Wax | .03⅞ | .04 | .04⅜ | .04½ | .04⅜ | .04½ |

*At Warren, Pa. †At New York City.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **GULF COAST (South Texas)—** | | | | | | | |
| No. 2 | color, 100 vis., pale oil | .07½ | .08½ | .08 | .08½ | .08 | .09 |
| No. 3 | color, 200 vis., pale oil | .10½ | .11½ | .11 | .11½ | .11 | .12 |
| No. 3 | color, 300 vis., pale oil | .11½ | .12½ | .12 | .12½ | .12 | .13 |
| No. 3½ | color, 500 vis., pale oil | .13½ | .14 | .14 | .14½ | .14 | .15 |
| No. 4 | color, 750 vis., pale oil | .16 | .16½ | .16 | .16½ | .16 | .17 |
| No. 5 to 6 color, 200 vis., red oil | | .08½ | .09½ | .09 | .09½ | .09 | .10 |
| No. 5 to 6 color, 300 vis., red oil | | .10 | .11 | .10½ | .11 | .11 | .12 |
| No. 5 to 6 color, 500 vis., red oil | | .11½ | .12½ | .12 | .12½ | .12 | .13 |
| No. 5 to 6 color, 750 vis., red oil | | .14½ | .15½ | .15 | .15½ | .15 | .16 |
| **CALIFORNIA—** | | | | | | | |
| 130 vis., 2½-3 | color | .10½ | .11 | .10½ | .11 | .10 | .10½ |
| 200 vis., 2½-3 | color | .11 | .11½ | .11 | .11½ | .10½ | .11 |
| 300 vis., 3 -3½ | color | .11½ | .12 | .11½ | .12 | .11 | .11½ |

# REFINERY AND CRUDE PRICES

**Quotations on Principal Refined Products and Crude Petroleum Markets in All the American Oil Fields**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 350 vis., 3½-4 | color | .12 | .13 | .12 | .13 | .11 | .11½ |
| 400 vis., 3½-4 | color | .13 | .15½ | .13 | .15½ | .12½ | .13 |
| Red Neutral: | | | | | | | |
| 200 vis., 4½-5 | color | .09½ | .10 | .09½ | .10½ | .09 | .09½ |
| 300 vis., 5 -6 | color | .10½ | .11½ | .10½ | .11½ | .09½ | .10 |
| 400 vis., 5 -6 | color | .12 | .13½ | .12 | .13½ | .11½ | .12 |
| 500 vis., 4½-5 | color | .13½ | .14½ | .13½ | .14½ | .12 | .13½ |
| 500 vis., 5 -6½ | color | .12½ | .13½ | .12½ | .13½ | .12 | .12½ |
| 600 vis., 6½ plus | color | .13½ | .14½ | .13½ | .14½ | .12½ | .13 |

Note: Bright stocks are not manufactured commercially on the Pacific Coast.

## NEW YORK (BAYONNE) REFINERY PRICES

| | Mar. 22 | Mar. 15 | Mar. 8 |
|---|---|---|---|
| Gasoline, U. S. Motor, 58-60 437 | .10½ | .11 | .12 |
| Kerosene, water white, 41-43 | .07½ | .08 | .08 |
| *Fuel Oil, bunker "C," 14-16, per bbl. | 1.75 | 1.75 | 1.75 |
| *Fuel Oil, Diesel, 28-30, per bbl. | 2.50 | 2.50 | 2.40 |
| Gas Oil, 28 plus | .06¼ | .06¼ | .06¼ |
| 25 pale Paraffin Oil | .12 | .13 | .13 |
| 28 pale Paraffin Oil | .07½ | .08 | .08 |
| 28S red Paraffin Oil | .13 | .13½ | .13½ |
| 250 red Paraffin Oil | .12 | .12½ | .12½ |
| 225 red Paraffin Oil | .11 | .11 | .11 |
| 200 red Paraffin Oil | .10 | .10 | .10 |
| Refined Wax: | | | |
| 120-122 a.m.p., per lb. | .05½ | .05½ | .05½ |
| 125-127 a.m.p., per lb. | .05⅝ | .05⅝ | .05⅝ |
| 130-132 a.m.p., per lb. | .06 | .06 | .06 |
| 135-137 a.m.p., per lb. | .06⅜ | .06⅜ | .06⅜ |
| Petrolatum, in bbls.; carload lots, per lb. | | | |
| Dark green | .02 | .02 | .02 |
| Amber | .03⅜ | .03⅜ | .03⅜ |
| Extra amber | .03¾ | .03¾ | .03¾ |
| Cream | .05½ | .05½ | .05½ |
| Lily white | .07½ | .07½ | .07½ |
| Snow white | .08½ | .08½ | .08½ |

*Lighterage 5.5c a barrel extra.

## NEW YORK (BAYONNE) EXPORT PRICES

| | Mar. 22 | Mar. 15 | Mar. 8 |
|---|---|---|---|
| Gasoline, U. S. Motor, 58-60 437, in cases | .2465 | .2565 | .2565 |
| Kerosene, standard white, in cases | .1715 | .1765 | .1815 |
| Kerosene, water white, in cases | .1815 | .1865 | .1965 |
| 600 steam refined cylinder stock, in bbls. | .19 | .20 | .20 |
| 635 steam refined | .21 | .22 | .22 |
| 650 steam refined | .23 | .23½ | .23½ |
| 600 Pennsylvania flash | .27 | .28 | .28 |
| 639 Pennsylvania flash | .34 | .35 | .35 |
| 600 Warren E | .26 | .27 | .27 |
| 600 Oil City E | .24 | .25 | .25 |
| Light 135 | .45 | .46 | .46 |
| Dark 135 | .43 | .44 | .44 |

## LOS ANGELES EXPORT PRICES

| | Mar. 22 | | Mar. 15 | | Mar. 8 | |
|---|---|---|---|---|---|---|
| Kerosene water white | .05¾ | .06½ | .05¾ | .06½ | .05¼ | .05¾ |
| U. S. Motor Gasoline, 53-55 437 e.p. | .08 | .08½ | .08½ | .09 | .08½ | .09¼ |

## CRUDE OIL PRICES

### OKLAHOMA, KANSAS, NORTH AND EAST CENTRAL TEXAS

*Corsicana heavy (March 14, 1927) ..... $1.00
Other fields ..... See gravity table

*Posted by Magnolia Petroleum Co.

### TEXAS PANHANDLE

*Carson County ..... $ .95
*Hutchinson County ..... .95
Gray-Wheeler Counties ... See gravity table

*Humble Oil & Refining Co., Magnolia Petroleum Co., Gulf Pipe Line Co. and Kay County Gas Co., March 14.

### WEST TEXAS

*Iatan (Same as North Texas)
Crane-Upton-Crockett ..... See gravity table

*Includes Howard County and Westbrook Fields. Kay County Gas Co. pays $1.16 for Howard County crude, effective March 12.

### ARKANSAS-NORTH LOUISIANA

Cotton Valley (March 11) ..... $1.00
Bellevue (Feb. 24, 1927) ..... 1.00
Urania (March 16, 1927) ..... 1.10
East El Dorado (March 16) ..... 1.00
Other fields ..... See gravity table

Note—Cotton Valley and Bellevue, Standard Oil Co. of Louisiana, Gulf Refining Co. and Magnolia Petroleum Co.; Urania, Louisiana Oil Refining Corp.; East El Dorado, Magnolia Petroleum Co.

### GULF COAST

(Goose Creek, Hull, Liberty, West Columbia, Orange, Boling, Sour Lake, Humble, High Island, Pierce Junction and Spindletop.)

‡Grade A (March 14) ..... $1.20
Grade B ..... See gravity table
*Jennings, La. (March 14) ..... 1.05
†Saratoga, Batson, Dayton (March 14, 1927) ..... 1.20
**Markham March 14 ..... 1.00

*Gulf Pipe Line Co. †Sun Pipe Line Co. ‡Humble Oil & Refining Co. and other major buyers. **The Texas Company.

### SOUTH CENTRAL AND SOUTHWESTERN TEXAS

*Luling (March 14) ..... $1.05
†Mirando (March 14) ..... 1.00
Rockdale-Minerva (Milam County) ... 1.25
*Thrall ..... 1.75
Callihan (May 15) ..... 1.75
Lytton Springs (Lockhart) See gravity table
Somerset ..... See gravity table

*Posted by Magnolia Petroleum Co. Thrall prices same as north central Texas less 19⅛ cents per cwt. freight.
†Magnolia Petroleum Co., Humble Oil & Refining Co.

### ROCKY MOUNTAIN STATES

**Ohio Oil Co.-Midwest Refining Co.**
(Effective March 14)

Rock Creek, Wyo. (March 12) ..... $1.25
Salt Creek ..... See gravity table
Big Muddy (March 12) ..... 1.25
Mule Creek (February 23) ..... 1.30
Grass Creek, light (March 12) ..... 1.33
Grass Creek, heavy ..... .68
Elk Basin (March 12) ..... 1.33
Lance Creek (March 12) ..... 1.33
Poison Spider ..... 1.00
Notches ..... .65
Rex Lake (February 23) ..... 1.10
Osage ..... 1.33
Lost Soldier (contract) (May 17) ..... 1.60
Greybull-Torchlight ..... 1.33
Hamilton Dome ..... 1.36
Cat Creek (Mont.) ..... 1.33
Sunburst (Mont.) (October 5) ..... 1.35
Artesia (March 12) ..... 1.00
Hogback (N. Mex.) ..... 1.78

Note: Salt Creek, Osage, Cat Creek, Greybull and Hogback posted by Midwest Refining Co., and the remainder by the Ohio Oil Co. Both companies post Grass Creek light and Elk Basin.

### EASTERN STATES

**Joseph Seep Purchasing Agency**
(Effective March 7)

Penna Grade Oil in New York Transit Line (New York) ..... $3.15
Bradford District Oil in National Transit Lines (Pennsylvania) ..... 3.15
Penna Grade Oil in National Transit Lines (Pennsylvania) ..... 3.05
Penna Grade Oil in Southwest Pennsylvania Lines (West Virginia) ..... 3.05
Penna Grade Oil in Eureka Pipe Line lines (Pennsylvania) ..... 3.00

(Continued on Page 148)

## CRUDE OIL GRAVITY PRICE TABLE

| Gravity— | Okla., Kans., N. C. Tex., La.-Ark. 1 | Smackover, Ark. 2 | Stephens, Ark. 3 | Wheeler and Gray Counties, (Texas Panhandle). 4 | Crane, Upton Crockett Counties (West Texas) 5 | Salt Creek, Wyo. 6 | Grade B & Light Crude (G. Coast) 7 | Somerset (South Central Texas) 8 |
|---|---|---|---|---|---|---|---|---|
| Below 24 | .... | 1.00 | .... | .... | .... | .... | .... | .... |
| 24 to 24.9 | .... | 1.25 | .... | .... | .... | .... | .... | .... |
| Below 25 | .... | .... | .... | .... | .... | .... | 1.15 | .... |
| 25 to 25.9 | .... | .... | .... | .... | .... | .... | 1.17 | .... |
| Below 26 | .... | .... | .... | .... | .70 | .... | .... | .... |
| 26 to 26.9 | .... | .... | .... | .... | .72 | .... | 1.19 | .... |
| 27 to 27.9 | .... | .... | .... | .... | .74 | .... | 1.21 | .... |
| Below 28 | **** | .... | 1.00 | .... | .... | .... | .... | .... |
| 28 to 28.9 | 1.12 | .... | 1.02 | .80 | .76 | .... | 1.23 | 1.23 |
| 29 to 29.9 | 1.14 | .... | 1.04 | .82 | .78 | 1.14 | 1.25 | 1.26 |
| 30 to 30.9 | 1.16 | .... | 1.06 | .84 | .80 | 1.16 | 1.27 | 1.29 |
| 31 to 31.9 | 1.18 | .... | 1.08 | .86 | .82 | 1.18 | 1.29 | 1.32 |
| 32 to 32.9 | 1.20 | .... | 1.10 | .88 | .84 | 1.20 | 1.31 | 1.35 |
| 33 to 33.9 | 1.22 | .... | .... | .90 | .86 | 1.22 | 1.33 | 1.38 |
| 34 to 34.9 | 1.24 | .... | .... | .92 | .88 | 1.24 | 1.35 | 1.41 |
| 35 to 35.9 | 1.26 | .... | .... | .94 | .90 | 1.26 | 1.37 | 1.44 |
| 36 to 36.9 | 1.28 | .... | .... | .96 | .92 | 1.28 | .... | 1.47 |
| 37 to 37.9 | 1.30 | .... | .... | .98 | .... | 1.30 | .... | 1.50 |
| 38 to 38.9 | 1.32 | .... | .... | 1.00 | .... | .... | .... | 1.53 |
| 39 to 39.9 | 1.34 | .... | .... | 1.02 | .... | .... | .... | .... |
| 40 to 40.9 | 1.36 | .... | .... | 1.04 | .... | .... | .... | .... |
| 41 to 41.9 | 1.38 | .... | .... | 1.06 | .... | .... | .... | .... |
| 42 to 42.9 | 1.40 | .... | .... | 1.08 | .... | .... | .... | .... |
| 43 to 43.9 | 1.42 | .... | .... | 1.10 | .... | .... | .... | .... |
| 44 to 44.9 | 1.44 | .... | .... | 1.12 | .... | .... | .... | .... |
| 45 to 45.9 | 1.46 | .... | .... | .... | .... | .... | .... | .... |
| 46 to 46.9 | 1.48 | .... | .... | .... | .... | .... | .... | .... |
| 47 to 47.9 | 1.50 | .... | .... | .... | .... | .... | .... | .... |
| 48 to 48.9 | 1.52 | .... | .... | .... | .... | .... | .... | .... |
| 49 to 49.9 | 1.54 | .... | .... | .... | .... | .... | .... | .... |
| 50 to 50.9 | 1.56 | .... | .... | .... | .... | .... | .... | .... |
| 51 to 51.9 | 1.58 | .... | .... | .... | .... | .... | .... | .... |
| 52 and above | 1.60 | .... | .... | .... | .... | .... | .... | .... |

Column 1—Oklahoma: Prairie Oil & Gas Co., Sinclair Oil & Gas Co., Gypsy Oil Co., Magnolia Petroleum Co., March 12; Carter Oil Co., The Texas Company, March 14.

North Central Texas—(Including Ranger, Mexia, Powell, Richland, Wortham, Lytton Springs [Southwest Texas], Iatan and Panola [Magnolia only], Currie, Nocona, Moran and Corsicana light): Magnolia, Texas, Prairie, Sinclair and Gulf, March 12; The Texas Company. Humble Oil & Refining Co., March 14

Kansas—Prairie, Sinclair, Magnolia, March 12; Carter, Texas, March 14.

Arkansas and North Louisiana—(Caddo, Bull Bayou, Crichton, DeSoto, Haynesville, Homer and El Dorado only): Standard Oil Co. of Louisiana, March 14; The Texas Company, March 14; Magnolia Petroleum Co., Pine Island, Haynesville and Bull Bayou, El Dorado, March 14; El Dorado, March 14; Gulf Pipe Line Co., March 14.

Column 2—Standard Oil Co. of Louisiana, The Texas Company, Gulf, Atlantic, March 17, Magnolia Petroleum Co. (March 16) posted price of $1.00 for below 24 degrees and $1.15 for 24 and above. Louisiana Oil Corp. posted following prices effective March 16: below 24, $1.00; 24 to 27.9, $1.15; 28 to 28.9, $1.17; 29 to 29.9, $1.19; 30 and above $1.21.

Column 3—Atlantic Oil Producing Co., March 14.

Column 4—Humble Oil & Refining Co. and Gulf Pipe Line Co., March 14.

Column 5—Humble Oil & Refining Co., Kay County Gas Co. and Gulf Pipe Line Co., March 14.

Column 6—Midwest Refining Co., March 12, 1927. All crude over 37 gravity, $1.30 per bbl.

Column 7—Humble Oil & Refining Co. and other major buyers (schedule ends "35 and above"), March 14, with exception of Magnolia Petroleum Co. which stops at 31 degrees gravity. Sun Pipe Line Co. posts 2 cents differential for each degree above 35 gravity and $1.47 for 40 gravity and above.

Column 8—Grayburg Pipe Line Co. and Pioneer Oil & Refining Co., March 7.

****Prices for crude below 28 gravity: Oklahoma, Kansas and Texas, Magnolia Petroleum Co., $1.10, March 12, 1927; Arkansas, North Louisiana, March 14. Other companies, 2 cents less for each degree with exception of Humble Oil & Refining Co. which pays $1.12 for crude below 28 degrees gravity.

### CALIFORNIA CRUDE PRICES

***Standard Oil Co.-Union Oil Co. (Effective March 11, 1926)**

| Gravity— | Long Beach Huntington Beach Brea-Olinda Rosecrans-Dom'guez Torrance-Inglewood | Whittier La Habra Montebello | Kern River Newhall-McKittrick Midway-Sunset Elk Hills Lost Hills Beiridge | Coyote | Santa Fe Springs | Coalinga | Wheeler Ridge | Santa Maria Ventura Salt Lake |
|---|---|---|---|---|---|---|---|---|
| 14° | .85 | .85 | .75 | .85 | .... | .75 | .75 | .85 |
| 15° | .87 | .85 | .75 | .85 | .... | .75 | .75 | .85 |
| 16° | .90 | .85 | .75 | .85 | .... | .75 | .75 | .85 |
| 17° | .94 | .86 | .75 | .85 | .... | .75 | .75 | .85 |
| 18° | .98 | .86 | .75 | .86 | .... | .75 | .75 | .85 |
| 19° | 1.04 | .87 | .75 | .87 | .... | .75 | .76 | .85 |
| 20° | 1.10 | .89 | .82 | .90 | .89 | .79 | .78 | .90 |
| 21° | 1.16 | .91 | .90 | .98 | .91 | .86 | .81 | .97 |
| 22° | 1.22 | .94 | 1.00 | 1.06 | .94 | .93 | .85 | 1.04 |
| 23° | 1.28 | .97 | 1.11 | 1.14 | .97 | 1.00 | .89 | 1.11 |
| 24° | 1.34 | 1.01 | 1.22 | 1.22 | 1.02 | 1.07 | .93 | 1.18 |
| 25° | 1.40 | 1.05 | 1.33 | 1.30 | 1.08 | 1.14 | .97 | 1.25 |
| 26° | 1.46 | 1.09 | 1.44 | 1.33 | 1.16 | 1.21 | 1.01 | 1.32 |
| 27° | 1.52 | 1.13 | 1.55 | 1.46 | 1.24 | 1.28 | 1.05 | 1.39 |
| 28° | 1.58 | 1.17 | 1.66 | 1.54 | 1.32 | 1.35 | .... | 1.46 |
| 29° | 1.64 | 1.21 | 1.77 | 1.62 | 1.40 | 1.42 | .... | 1.53 |
| 30° | 1.70 | 1.25 | 1.88 | 1.70 | 1.48 | 1.49 | .... | 1.60 |
| 31° | 1.76 | .... | 1.99 | .... | 1.60 | 1.56 | .... | 1.67 |
| 32° | 1.84 | .... | 2.10 | .... | 1.72 | 1.63 | .... | 1.78 |
| 33° | 1.92 | .... | 2.21 | .... | 1.84 | 1.70 | .... | 1.79 |
| 34° | 2.00 | .... | 2.32 | .... | 1.96 | 1.77 | .... | 1.86 |
| 35° | 2.08 | .... | .... | .... | 2.08 | 1.84 | .... | 1.92 |
| 36° | 2.16 | .... | .... | .... | 2.16 | .... | .... | .... |
| 37° | 2.24 | .... | .... | .... | 2.24 | .... | .... | .... |
| 38° | 2.34 | .... | .... | .... | 2.34 | .... | .... | .... |
| 39° | 2.44 | .... | .... | .... | 2.44 | .... | .... | .... |
| 40° | 2.54 | .... | .... | .... | .... | .... | .... | .... |
| 41° | 2.64 | .... | .... | .... | .... | .... | .... | .... |
| 42° | 2.74 | .... | .... | .... | .... | .... | .... | .... |

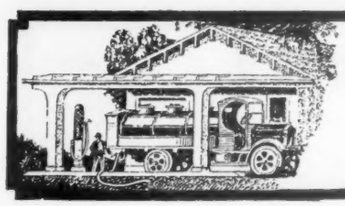
*Column 2—Long Beach and Huntington Beach crudes, 14 to 32 degrees, inclusive; Richfield and Brea-Olinda, 14 to 30 degrees; Torrance and Inglewood, 14 to 28 degrees; Domingues, 24 to 42 degrees. Rosecrans crude ranges from 14 to 42 degrees, but only Union Oil Co. posts below 24 degrees.

Column 3—Whittier and La Habra crudes, 14 to 22 degrees; Montebello, 14 to 30 degrees.

Column 4—Kern River, Newhall and McKittrick, 14 to 19 degrees; Midway-Sunset and Elk Hills, 14 to 33 degrees; Lost Hills and Beiridge, 14 to 34 degrees.

Column 6—Santa Fe Springs. Only Union Oil Co. posts below 24 degrees.

Column 9—Salt Lake, 14 to 19 degrees, inclusive; Santa Maria, 14 to 30 degrees; Ventura, 14 to 35 degrees. Posted only by Union Oil Co.



# TANK WAGON MARKETS

Tank wagon quotations for gasoline and kerosene in United States as furnished by the larger marketing concerns, March 22.

## ALL TANK WAGON AND SERVICE STATION QUOTATIONS INCLUDE TAXES

### STANDARD OIL CO. (INDIANA)

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wagon | Service station | Incids tax of | Tank wagon |
| Chicago dist. | 16.0 | 18.0 | ... | 13.0 |
| Decatur, Ill. | 16.2 | 18.2 | ... | 13.1 |
| E. St. Louis | 15.1 | 17.35 | ... | 12.2 |
| Joliet | 16.4 | 18.4 | ... | 13.3 |
| Peoria | 16.2 | 18.2 | ... | 13.1 |
| Quincy | 16.2 | 18.2 | ... | 11.4 |
| Davenport, Ia. | 18.5 | 20.5 | 2.0 | 13.3 |
| Des Moines | 16.0 | 18.0 | 2.0 | 13.3 |
| Keokuk | 18.5 | 20.5 | 2.0 | 13.3 |
| Sioux City | 18.7 | 20.7 | 2.0 | 12.9 |
| Duluth, Minn. | 19.5 | 21.5 | 2.0 | 13.9 |
| Minneapolis | 17.2 | 19.2 | 2.0 | 13.9 |
| LaCrosse, Wis. | 19.2 | 21.2 | 2.0 | 14.6 |
| Milwaukee | 18.1 | 20.1 | 2.0 | 12.9 |
| Madison | 18.3 | 20.3 | 2.0 | 13.1 |
| Detroit, Mich. | 18.8 | 20.8 | 2.0 | 14.7 |
| Grand Rapids | 18.7 | 20.7 | 2.0 | 14.6 |
| Saginaw | 18.9 | 20.9 | 2.0 | 14.8 |
| Evansville, Ind. | 19.0 | 21.0 | 3.0 | 14.0 |
| Ft. Wayne | 19.4 | 21.4 | 3.0 | 14.4 |
| Indianapolis | 19.2 | 21.2 | 3.0 | 14.2 |
| S. Bend | 19.4 | 21.4 | 3.0 | 14.4 |
| Fargo, N. D. | 20.9 | 22.9 | 2.0 | 15.9 |
| Huron, S. D. | 20.5 | 22.5 | 3.0 | 14.9 |
| Sioux Falls | 19.3 | 21.3 | 3.0 | 14.4 |
| *K. C., Mo. | 18.0 | 20.0 | 3.0 | 11.6 |
| *Springfield | 18.8 | 20.8 | 3.0 | 12.5 |
| *St. Louis | 17.6 | 19.9 | 2.5 | 12.3 |
| *St. Joseph | 18.5 | 20.5 | 3.0 | 12.2 |
| Wichita, Kans. | 17.8 | 19.8 | 2.0 | 13.0 |
| Bartlesville, Ok. | 17.8 | 19.8 | 3.0 | 11.5 |

### NAPHTHAS

| | Tank wagon | Tank car |
|---|---|---|
| Oleum spirits | 18.0 | 13.5 |
| V. M. & P. naphtha | 20.0 | 15.5 |
| Cleaner's naphtha | 20.0 | 15.5 |
| Stanisol | 21.0 | .... |

Tankwagon prices f.o.b. Chicago; tank car prices f.o.b. Whiting.

### STANOLIND FURNACE OIL

| | |
|---|---|
| Less than 100 gallons | 10.0 |
| 100 to 799 gallons | 9.0 |
| 800 or more gallons | 8.5 |

Tankwagon prices of gasoline subject to discount of 1 cent a gallon on dumps of 50 gallons or more throughout territory except Chicago district where discount applies only to dumps of 100 gallons. Kerosene subject to 1 cent discount on dumps of 50 gallons or more.

In addition the following quantity discount schedule is in effect on monthly tankwagon deliveries of gasoline 6,000 gallons or more, 1½ cents; 10,000 gallons or more, 2 cents; 15,000 gallons or more, 3 cents. In the Chicago district purchases of 750 to 2,000 gallons a month discounted one-half cent; and, 2,000 to 6,000 gallons, three-quarters cent. If the quantity bought during the year is 12 times the monthly agreed purchases the discount is paid or credited on the entire quantity less monthly payments.

Monthly service station deliveries of 200 gallons or more, and annual deliveries of 2,400 gallons or more are discounted 2 cents.

*State tax 2 cents; remainder city tax.

### SOUTHWESTERN DISTRICT

*Magnolia Petroleum Co.

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wagon | Service station | Incids tax of | Tank wagon |
| Dallas, Tex. | 15.0 | 19.0 | 3.0 | 15.0 |
| Fort Worth | 16.0 | 17.0 | 3.0 | 13.0 |
| Houston | 16.0 | 19.0 | 3.0 | 15.0 |
| San Antonio | 16.0 | 19.0 | 3.0 | 12.0 |
| El Paso | 17.0 | 19.0 | 3.0 | 16.0 |
| Texarkana | 16.0 | 19.0 | 3.0 | 15.0 |
| Muskogee, Ok. | 16.0 | 19.0 | 3.0 | 10.0 |
| Okla. City | 16.0 | 19.0 | 3.0 | 10.0 |
| Tulsa | 16.0 | 19.0 | 3.0 | 10.0 |
| Little Rock | 17.0 | 20.0 | 4.0 | 12.0 |
| Ft. Smith, Ark. | 17.0 | 20.0 | 4.0 | 12.0 |

*The following is the schedule of discounts on quantity gasoline sales adopted by the Magnolia Petroleum Co. in Oklahoma: Over 750 gallons a month, ¼c; over 2,000 gallons, ¾c; over 3,000 gallons, 1c; over 4,500 gallons, 1¼c; over 6,000 gallons, 1½c; over 9,000 gallons, 1¾c; over 10,000 gallons, 2c. If the quantity bought during the year is 12 times the monthly agreed purchases, the discount will be paid or credited on the entire quantity for the year less any monthly purchases.

The schedule on service station deliveries is: Over 200 gallons a month, 1c; over 300 gallons a month, 1¼c; over 400 gallons, 1½c; over 600 gallons a month, 1¾c; over 800 gallons, 2c. The same rule applies for annual purchases as in the tankwagon discounts.

### CENTRAL SOUTH DISTRICT

Standard Oil Co. (Louisiana)

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wagon | Service station | Incids tax of | Tank wagon |
| *New Orleans | 15.5 | 18.5 | 3.0 | 13.0 |
| Alexandria | 15.0 | 18.0 | 2.0 | 14.0 |
| Baton Rouge | 14.0 | 17.0 | 2.0 | 12.0 |
| LaFayette | 15.0 | 18.0 | 2.0 | 13.5 |
| Lake Charles | 15.5 | 18.5 | 2.0 | 14.0 |
| Shreveport, La. | 14.0 | 17.0 | 2.0 | 13.0 |
| Memphis, Tenn. | 17.0 | 20.0 | 3.0 | 14.0 |
| Chattanooga | 18.5 | 21.5 | 3.0 | 14.0 |
| Knoxville | 18.5 | 21.5 | 3.0 | 15.0 |
| Nashville | 18.0 | 21.0 | 3.0 | 15.0 |
| Bristol | 19.0 | 22.0 | 3.0 | 14.0 |
| Lit. Rock, Ark. | 17.0 | 20.0 | 4.0 | 12.0 |

*Tax of 3c includes city tax of 1c.
*Louisiana kerosene prices include 1-cent state tax.

### OHIO

Standard Oil Co. (Ohio)

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wagon | Service station | Incids tax of | Tank wagon |
| All Ohio points | 20.0 | 22.0 | 2.0 | 15.0 |

### SOUTHERN DISTRICT

Standard Oil Co. (Kentucky)

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wagon | Service station | Incids tax of | Tank wagon |
| Atlanta, Ga. | 21.0 | 24.0 | 3.5 | 18.0 |
| Augusta | 21.0 | 24.0 | 3.5 | 17.0 |
| Macon | 21.0 | 24.0 | 3.5 | 18.0 |
| Savannah | 21.0 | 24.0 | 3.5 | 16.0 |
| Birm'ghm, Ala. | 21.0 | 24.0 | 4.0 | 17.5 |
| Mobile | 20.0 | 23.0 | 4.0 | 16.0 |
| Montgomery | 22.0 | 23.0 | 5.0 | 18.5 |
| Clarksd'le, Miss. | 20.0 | 23.0 | 4.0 | 14.5 |
| Jackson | 20.0 | 23.0 | 4.0 | 15.5 |
| Natchez | 19.5 | 22.5 | 4.0 | 15.0 |
| Gulfport | 21.5 | 24.5 | 6.0 | 15.0 |
| Vicksburg | 19.5 | 22.5 | 4.0 | 15.0 |
| Jack'ville, Fla. | 19.0 | 22.0 | 4.0 | 16.0 |
| Miami | 21.0 | 24.0 | 4.0 | 17.5 |
| Pensacola | 20.0 | 23.0 | 5.0 | 16.5 |
| Tampa | 19.0 | 22.0 | 4.0 | 16.0 |
| Covington | 21.0 | 24.0 | 5.0 | 17.0 |
| Louisville | 20.0 | 23.0 | 5.0 | 17.0 |
| Lexington, Ky. | 22.0 | 25.0 | 5.0 | 17.0 |

In addition to the state tax of 2c on gasoline, Montgomery has city tax of 1c on gasoline and ½c on kerosene. Prices in Georgia include ⅛c inspection fee on gasoline and kerosene; in Florida, an inspection fee of 0.125c; in Alabama, an inspection fee of ½c on kerosene only. Pensacola tax includes 1c city levy. Gulfport tax includes privilege tax of 2c in addition to state tax.

### PENNSYLVANIA-DELAWARE AND PART NEW ENGLAND

Atlantic Refining Co.

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wagon | Service station | Incids tax of | Tank wagon |
| Pittsburgh, Pa. | 18.0 | *23.0 | ... | 15.0 |
| Philadelphia | 17.0 | 21.0 | ... | 15.0 |
| Scranton | 18.0 | *23.0 | ... | 15.0 |
| Allentown | 18.0 | *23.0 | ... | 15.0 |
| Altoona | 18.0 | *23.0 | ... | 15.0 |
| Erie | 18.0 | *23.0 | ... | 16.0 |
| Dover, Del. | 20.0 | 23.0 | 2.0 | 15.0 |
| Wilmington | 20.0 | 23.0 | 2.0 | 15.0 |
| Spring'd, Mass. | 21.0 | 23.0 | ... | 17.0 |
| Worcester | 21.0 | 23.0 | ... | 17.0 |
| Boston | 21.0 | 23.0 | ... | 15.0 |
| Providence, R.I. | 22.0 | 24.0 | 1.0 | 17.0 |
| Hartford, Conn. | 23.0 | 25.0 | 2.0 | 17.0 |
| New Haven | 23.0 | 25.0 | 2.0 | 17.0 |

*Includes tax of 2 cents. Pennsylvania tax is collected by the dealer and paid by him direct to the State.

### ATLANTIC COAST DISTRICT

Standard Oil Co. (New Jersey)

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wagon | Service station | Incids tax of | Tank wagon |
| Atlantic City | 17.0 | .... | ... | 14.0 |
| Newark, N. J. | 17.0 | 19.0 | ... | 14.0 |
| Annapolis, Md. | 19.0 | .... | 2.0 | 14.0 |
| Baltimore | 19.0 | 22.0 | 2.0 | 14.0 |
| Cumberland | 19.0 | 22.0 | 2.0 | 14.0 |
| Washington | 19.0 | 22.0 | 2.0 | 12.0 |
| Danville, Va. | 21.5 | .... | 4.5 | 14.0 |
| Norfolk | 21.5 | 24.5 | 4.5 | 14.0 |
| Petersburg | 21.5 | 24.5 | 4.5 | 14.0 |
| Roanoke | 21.5 | 24.5 | 4.5 | 14.0 |
| Richmond | 21.5 | 24.5 | 4.5 | 14.0 |
| Charleston, W. Va. | 20.5 | 23.5 | 3.5 | 14.0 |
| Keyser | 20.5 | .... | 3.5 | 14.0 |
| Parkersburg | 20.5 | 23.5 | 3.5 | 14.0 |
| Wheeling | 20.5 | 23.5 | 3.5 | 14.0 |
| Charlotte, N. C. | 21.0 | 24.0 | 4.0 | 14.0 |
| Hickory | 21.0 | 24.0 | 4.0 | 14.0 |
| Mt. Airy | 21.0 | 24.0 | 4.0 | 14.0 |
| Salisbury | 21.0 | 24.0 | 4.0 | 14.0 |
| Charl'stn, S. C. | 22.0 | 25.0 | 5.0 | 14.0 |
| Columbia | 22.0 | 22.0 | 5.0 | 15.0 |

### PACIFIC COAST DISTRICT

Standard Oil Co. (California

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wagon | Service station | Incids tax of | Tank wagon |
| San Francisco | 14.0 | 17.0 | 2.0 | 15.5 |
| Los Angeles | 13.5 | 16.5 | 2.0 | 15.5 |
| Fresno | 14.0 | 17.0 | 2.0 | 17.5 |
| Reno, Nev. | 22.0 | 25.0 | 4.0 | 19.0 |
| Portland, Ore. | 17.0 | 20.0 | 2.0 | 16.5 |
| Seattle, Wash. | 16.0 | 19.0 | 2.0 | 16.5 |
| Tacoma | 16.0 | 19.0 | 2.0 | 16.5 |
| Spokane | 20.0 | 23.0 | 2.0 | 20.5 |
| Phoenix, Ariz. | 22.0 | 25.0 | 3.0 | 20.5 |

### NEW YORK AND PART OF NEW ENGLAND DISTRICT

Standard Oil Co. (New York)

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wagon | Service station | Incids tax of | Tank wagon |
| Albany, N. Y. | 20.0 | 22.0 | ... | 16.0 |
| *New York | 20.0 | 24.0 | ... | 16.0 |
| Buffalo | 19.0 | 22.0 | ... | 14.0 |
| Rochester | 19.0 | 22.0 | ... | 14.0 |
| Syracuse | 20.0 | 22.0 | ... | 16.0 |
| Boston, Mass. | 20.0 | 22.0 | ... | 15.0 |
| Augusta, Me. | 23.0 | 27.0 | 3.0 | 16.0 |
| Manchester, N. H. | 22.0 | 24.0 | 2.0 | 16.0 |
| Burlington, Vt. | 22.0 | 24.0 | 2.0 | 16.0 |

*Price in steel barrels.

### NEBRASKA

Standard Oil Co. (Nebraska)

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wagon | Service station | Incids tax of | Tank wagon |
| Omaha | 16.25 | 19.25 | 2.0 | 13.25 |
| McCook | 19.75 | 21.75 | 2.0 | 14.75 |
| Norfolk | 18.0 | 20.0 | 2.0 | 13.75 |
| N. Platte | 19.75 | 21.75 | 2.0 | 14.50 |
| Scottsbluff | 19.25 | 21.25 | 2.0 | 14.00 |

### ROCKY MOUNTAIN DISTRICT

Continental Oil Co.

| | Gasoline | | | Kero. |
|---|---|---|---|---|
| | Tank wagon | Service station | Incids tax of | Tank wagon |
| Denver, Colo. | 19.0 | 21.0 | 2.0 | 15.5 |
| Pueblo | 17.0 | 18.0 | 2.0 | 15.5 |
| Grand Junction | 22.5 | 24.5 | 2.0 | 19.0 |
| Casper, Wyo. | 20.0 | 22.0 | 3.0 | 14.0 |
| Cheyenne | 21.0 | 23.0 | 3.0 | 15.5 |
| Butte, Mont. | 22.0 | 22.0 | 3.0 | 19.0 |
| Helena | 24.0 | 26.0 | 3.0 | 19.0 |
| Salt Lake, Utah | 23.0 | 25.0 | 3.5 | 17.0 |
| Boise, Idaho | 25.5 | 27.5 | 4.0 | 19.0 |
| Twin Falls | 25.5 | 27.5 | 4.0 | 19.0 |
| Albuquerque, N. M. | 23.0 | 26.0 | 5.0 | 18.0 |

## TANK WAGON CHANGES

March 5—Standard Oil Co. of Ohio reduced kerosene tank wagon 1 cent.

March 8—Standard Oil Co. of Kentucky reduced gasoline tank wagon and service station price 1 cent in Alabama.

March 10—Standard Oil Co. of Louisiana reduced kerosene tank wagon prices 1 cent in entire territory.

March 11—Standard Oil Co. of Kentucky advanced gasoline tank wagon and service station prices 1 cent in Georgia and Florida.

March 13—Atlantic Refining Co. reduced gasoline tank wagon 1 cent and service station 2 cents at Philadelphia.

March 14—Standard Oil Co. of Louisiana reduced gasoline tank wagon and service station prices 1 cent throughout territory with the exception of Tennessee. In latter State reduction of from one-half to 1 cent were made at some points, although no changes were made at Memphis and Nashville. Magnolia Petroleum Co. reduced gasoline tank wagon and service station price 1 cent at Fort Smith and Little Rock, Ark.

March 16—Magnolia Petroleum Co. advanced gasoline tank wagon and service station price 2 cents in Texas to cover increase in tax from 1 to 3 cents.

March 18—Magnolia Petroleum Co. reduced kerosene tank wagon at Tulsa and Oklahoma City, Okla., 2 cents and Muskogee 1 cent.

March 21—Standard Oil Co. of Ohio reduced gasoline tank wagon and service station price and kerosene tank wagon price 1 cent in Ohio.

## CRUDE OIL PRICE CHANGES

March 14—Sun Pipe Line Co. reduced Saratoga, Batson and Dayton, Tex., crudes 10 cents.

March 16—Joseph Seep Purchasing Agency reduced Cabell and Somerset crudes 10 cents. Stoll Oil Refining Co. reduced Oil City, Ky., crudes 15 cents. Magnolia Petroleum Co. reduced Smackover, Ark., crude below 24 gravity and above 24 gravity 10 cents. Same company reduced Cotton Valley and El Dorado East Field to $1. The Louisiana Oil Corp. reduced its five gravity schedule for Smackover crude 10 cents. Same company reduced Urania and Cotton Valley crudes to $1.

March 17—Standard Oil Co. of Louisiana reduced Smackover, Ark., crude below 24 gravity 10 cents. Joseph Seep Purchasing Agency reduced Corning crude 10 cents.

Note—The Ohio Oil Co. did not change Plymouth crude until March 14, when the price was reduced from $1.43 to $1.33.

## CALIFORNIA MARKET MATERIALLY WEAKER

LOS ANGELES, Calif., Mar. 19.—The past week has brought forth a very material weakening in the California oil market. On Thursday, one of the large marketing companies offered a differential of 6 cents per gallon on gasoline to independent service stations on a year's contract. This was the starting point for a general reduction in gasoline prices. Friday morning, the California Petroleum Corp. announced a 2-cent cut in the service station price throughout California. This reduction was met Saturday, March 19, by Standard Oil Co. and other major distributors in the state. These companies as now selling gasoline in the Los Angeles district at 16½ cents, including the 2-cent state tax.

This weakening has been expected but it arrived with such suddenness the industry as a whole was not prepared for it. The underlying factor is, of course, the overproduction of crude. The wholesale reducing of gasoline prices east of the Rockies served practically to eliminate California gasoline from the world markets under the prices heretofore in force in California. Information considered reliable states that practically no California gasoline has been sold for use in the East or in Europe during the past two months. Since the export outlet for gasoline was cut off, the natural result was a mad scramble by marketing companies to sell their gasoline locally. This competition came to a head the latter part of this week with the result prices are going down.

The outlook for natural gasoline is also poor at present. With a production that already exceeds the demand, new plants are being put up and production in the next few months is expected to continue to go up. The new field at Alamitos Heights is apt to be a very serious factor in the increased production. The Petroleum Securities Co. brought in the well proving up this territory. It is making gas at the rate of 1,500,000 feet per day, reported to contain four gallons of gasoline per 1,000 feet. The Pan American Petroleum Co. has erected a plant to treat this gas and is producing from the one well alone between 5,000 and 6,000 gallons per day.

## CRUDE OIL PRICES

(Continued from Page 147)

| | |
|---|---|
| Penna Grade Oil in Buckeye Pipe Line Lines (Ohio) | 2.86 |
| Cabell Grade Oil in Eureka Pipe Line Lines (West Virginia) March 16 | 1.40 |
| Corning 35-cent grade oil in Buckeye Pipe Line Co.'s line (March 17) | 1.45 |
| Corning 25-cent grade oil in Buckeye Pipe Line Co.'s lines (March 17) | 1.55 |
| Somerset Oil in Cumberland Pipe Line Lines (Kentucky) March 16 | 1.50 |
| Ragland Grade Oil in Cumberland Pipe Line Lines (Kentucky) | .95 |
| Keister (Pennsylvania) | 1.26 |

### MIDDLE WESTERN STATES

Ohio Oil Co.
(Effective March 14)

| | |
|---|---|
| Lima | $1.71 |
| Wooster | 1.77 |
| Illinois | 1.40 |
| Indiana | 1.43 |
| Princeton | 1.40 |
| Plymouth | 1.33 |
| Waterloo (Nov. 17, 1926) | 1.35 |
| *Western Kentucky | 1.33 |
| †Cumberland, Barren, Clinton and Monroe Counties, Kentucky (February 1) | 2.30 |
| ‡Oil in lines of Stoll Oil Refining Co. in Oil City, Ky. (March 16, 1927) | 1.50 |
| †Clay County, Tennessee (November 18) | 2.35 |
| §Oil Springs (Canada) | 2.10 |
| §Petrolia (Canada) | 2.14 |

*Posted by and Ohio Oil Co.
†Posted by Paragon Development Co.
‡Posted by Stoll Oil Refining Co.
§Posted by Imperial Oil Co., Ltd.

### MEXICO

(Effective May 13)

| | |
|---|---|
| *Tuxpam light (f.o.b. Mex. ports) | $1.85 |
| †Panuco heavy (f.o.b. Mex. ports) | 1.10 |
| Tuxpam (New York) | 2.15 |
| Panuco (New York) | 1.80 |

*Plus 32.328c tax. †17.631c tax.

# This SIGN is a *Satisfaction Signal* to motorists!

*Authorized Dealer*

**SINCLAIR OPALINE MOTOR OIL**

REG. U. S. PAT. OFF.

*Seals Power at every Degree of Wear*

WHEN a motorist buys oil at the station which displays this sign, he gets *correct lubrication*—and the Dealer gets more steady business, because the motorist is satisfied!

The method for recommending Opaline Motor Oil (used only by Authorized Opaline Dealers) is an outstanding success! That's because it is the correct method, based on the Sinclair Law of Lubrication. It provides different grades of Opaline to fit the different degrees of wear in automobile engines, as indicated by the mileage on motorists' speedometers. Opaline Dealers ask the motor oil customer his mileage—consult the Sinclair Recommendation Index, and then give him the correct grade. The motorist feels the difference in his car immediately and remembers which Dealer gave him that difference!

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SINCLAIR REFINING COMPANY, INC.

*Also Makers of Sinclair Gasoline and H-C Gasoline*

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Atlanta Boston Chicago Houston Kansas City

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## NORTH AND WEST TEXAS

(Continued from Page 47)

feet after a 200-quart shot and now making 125 bbls.

**Jack County**

Buttram Petroleum Co.'s No. 1 Kuykendall was a failure at 1,965 feet; No. 5 C. K. Cullers was put on pump and estimated at 40 bbls. at 2,057-62 feet. Seaboard Oil Co.'s No. 4 C. K. Cullers was also put on pump and estimated at 40 bbls. at 2,088-95 feet.

**Montague County**

Cato Oil Co.'s No. 12 Rolls Estate found sand at 846-73 feet and made 40 bbls. Continental Oil Co.'s No. 2 Bouldin was a duster at 1,712 feet; No. 19 Howard-A was also a failure at 1,610 feet; No. 19 Maddox-A was dry and abandoned at 1,450 feet; No. 20 made 35 bbls. at 915-35 feet; No. 13 Rowland-B found sand at 1,029-1,122 feet and made 77½ bbls.; No. 8 Salmon and others made 35½ bbls. at 897-915 feet, total depth 916 feet.

Humble Oil & Refining Co.'s No. 5 Howard, made 20 bbls. at 1,361-87 feet. Pure Oil Co.'s No. 1 Crowe made 50 bbls. initial from sand at 877-95 feet; No. 5 Maddox-D made 30 bbls. of oil and 2 per cent water at 846-66 feet. Smith Oil Co.'s No. 5 Maddox found sand at 870-92 feet and made 70 bbls. The Texas Company's No. 2 Bouldin was dry and abandoned at 1,668 feet; No. 9 Maddox-D had sand at 928-70 feet and made 70 bbls.; No. 1 McGaughy was a failure at 1,703 feet.

**Shackelford County**

Hope Petroleum Co.'s No. 8 Davis had sand at 1,437-40 feet and made 15 bbls.; No. 9 found sand at 1,438-48 feet and made 50 bbls.; No. 15 Reynolds made 60 bbls. at 1,262-70 feet; No. 16 made 60 bbls. at 1,291-1,405 feet. Hughes and others' No. 1 Bernstein was dry and abandoned at 853 feet. Hyde & James' No. 1 Moberly was a failure at 1,450 feet. Midwest Exploration Co.'s No. 1 Dyer pumped 26 bbls. at 876-82 feet. Milham Corp.'s No. 5 Moore had sand at 2,141-56 feet and made 50 bbls. Morton and others' No. 2 Davis had a hole full of oil at 1,508-10 feet and salt water the next foot.

Roeser & Pendleton and Marland Oil Co.'s No. 40 Cook-A-60 found sand at 1,149-58 feet and made 30 bbls.; No. 25-Cook-A-85 had sand at 1,318-36 feet and made 25 bbls.; No. 12 Moberly-A-13 made 2 bbls. at 1,447-60 feet; No. 15 Moberly-A-13 made 175 bbls. at 1,296-99 feet; No. 5 Moberly-B-12, made 125 bbls. at 1,231-41 feet and was plugged back to 1,239 feet; No. 1 Nail-A-154 was a duster at 2,029 feet. Sinclair Oil & Gas Co.'s No. 2 Nail was a failure at 2,004 feet.

Southern Petroleum Exploration Co.'s No. 4 Dyer found broken sand at 913-20 feet and pumped 10 bbls. after a 30-quart shot. Tannehill Oil Co.'s No. 4 Matthews made 48 bbls. at 1,007-21 feet.

**Stephens County**

Eidson's No. 1 Smith was shot with 10 quarts at 1,060-74 feet and made 15 bbls. of oil and 4,000,000 feet of gas. Milham Corp.'s No. 1 Thorp was dry and abandoned at 3,828 feet.

**Wichita County**

Chenault, Palmer & Burch's No. 4 Chapman made 1 bbl. initial from sand at 1,595-1,605 feet, total depth 1,611 feet. Continental Oil Co. and Magnolia Petroleum Co.'s No. 1-A Beach was a failure at 3,502 feet. Magnolia Petroleum Co.'s No. 132 Reilly made 75 bbls. at 1,328-34 feet; No. 44 Staley-Beach found sand at 1,167-75 feet and made 15 bbls. Bridwell & Mayfield's No. 3 Waggoner pumped 13 bbls. of oil and 13 bbls. of water at 1,894-97 feet. Bullington, Lee & Pendleton's No. 6 Jennings-B pumped 20 bbls. at 1,807-26 feet. Continental Oil Co.'s No. 13 Burnett-E was a failure at 2,000 feet. So was Culbertson company's No. 52 Waggoner at 1,617 feet. Dale Oil Corp.'s No. 21 Burnett was a duster at 1,407 feet. Empire Gas & Fuel Co.'s No. 21 Pierce Oil Corp. pumped 15 bbls. at 1,458-62 feet.

C. H. Gilchrist's No. 1 Overby was dry at 510 feet; No. 2 was also dry at 726 feet. Magnolia Petroleum Co.'s No. 1 Obenhaus was a failure at 2,065 feet; No. 18 Ramming-B had sand at 1,690-1,709 feet and pumped 40 bbls., total depth 1,710 feet; No. 1 R. Ramming pumped 15 bbls. at 1,748-87 feet, total depth 1,790 feet. O'Donohoe & Gates' No. 1 Love pumped 200 bbls. at 1,808-16 feet. John O'Neil's No. 2 Allingham was dry and abandoned at 1,972 feet. Panhandle Refining Co.'s No. 3 Griffin made 25 bbls. oil and 2 bbls. water initial from sand at 1,803-13 feet; No. 7 Riley-Griffin was a duster at 2,200 feet; No. 8 was also a failure at 1,873 feet.

Petroleum Producers Co.'s No. 6 Allen & Kemp-D pumped 40 bbls. at 1,644-53 feet; No. 1 "Shallow" Love-A was dry at 515 feet; No. 4 "Deep" Love-B found sand at 1,808-16 feet and pumped 100 bbls.; No. 6 "Shallow" Love-B had sand at 487-95 feet and pumped 15 bbls. Pois & Fine and others' No. 1 Waggoner was a failure at 2,208 feet. So was Rio Bravo Oil Co.'s No. 1 Waggoner-C a duster at 2,112 feet. C. P. Sheldon's No. 3 Obenhaus pumped 56 bbls. at 1,650-67 feet. Staley, Wynne and others' No. 3 Griffin found sand at 1,806-11 feet and pumped 55 bbls. oil and 2 bbls. water.

**Wilbarger County**

Fain-McGaha Oil Corp. and others' No. 5 Fluhman found sands at 1,471-78 and 1,478-86 feet and pumped 60 bbls., total depth 1,495 feet; No. 4 Waggoner-E, swabbing 450 bbls. at 1,955-90 feet. Humble Oil & Refining Co.'s No. 14 Waggoner-O found lime at 2,318-60 feet and sand at 2,360-90 feet and pumped 70 bbls., total depth 2,393 feet. Murchison Oil Co.'s No. 1 Waggoner was a failure at 2,034 feet. Phillips Petroleum Co.'s No. 4 Waggoner-R was flowing 170 bbls. in 16 hours at 1,868-77 feet, total depth 1,883 feet.

**Young County**

Boller and others' No. 1 Gragg made 40 bbls. at 733-46 feet. Cunningham and others' No. 2 Peters was a duster at 815 feet. King Royalty and Tidal Oil Co.'s No. 28 Benson-B made 20 bbls. initial from sand at 930½-39 feet. Nash & Windfohr and Phillips Petroleum Co.'s No. 1 Fawks found gas sand at 2,277-2,315 feet and oil sand at 2,315-45 feet and flowing 125 bbls. oil and 750,000 feet of gas. The Texas Company's No. 5 Stewart made 5 bbls. initial from sand at 801-21 feet, total depth 824 feet. Woods & Holbrook's No. 3 Watson made 40 bbls. initial from sand at 558-66 feet.

**NORTH CENTRAL TEXAS**
**Estimated Production for Week Ending March 19, 1927**

| Ranger District— | Bbls. |
|---|---|
| Brown County | 23,550 |
| Callahan County | 5,400 |
| Coleman County | 1,650 |
| Comanche County | 1,540 |
| Palo Pinto County | 480 |
| Ranger County | 6,990 |
| Shackelford County | 13,840 |
| Stephens County | 10,970 |
| Total Ranger district | 64,420 |
| Wichita Falls District— | |
| Archer County | 29,135 |
| Baylor County | 105 |
| Clay County | 730 |
| Cooke County | 1,400 |
| Jack County | 500 |
| Montague County | 13,600 |
| Throckmorton County | 1,800 |
| Wichita County | 32,025 |
| Wilbarger County | 15,120 |
| Young County | 8,900 |
| Total Wichita Falls district | 102,315 |
| **West Texas District** | |
| Big Lake Field | 29,140 |
| Crane County | 22,160 |
| Crockett County | 1,605 |
| Ector County | 30 |
| Garza County | 5 |
| Howard County | 2,310 |
| Jones County | 2,460 |
| Mitchell County | 4,350 |
| Pecos County | 170 |
| Scurry County | 35 |
| Upton County | 21,100 |
| Winkler County | 320 |
| Total West Texas district | 83,685 |
| Grand total N. and W Texas | 250,420 |
| Increase | 1,930 |

## SEMINOLE RESTRAINT CONSIDERED UNLIKELY

(Continued from Page 37)

tion of Turman property at Seminole and stated that, due to inadequate facilities for moving oil, production had decreased from 11,000 bbls. daily to 3,000 bbls., and was now back at 5,000 due to improved transportation conditions. Under questions from Edward H. Chandler, Sinclair company's general counsel, he testified that the Turman company now had ample empty tankage in the field and was building five 55,000-bbl. tanks. No further difficulties from this lease were anticipated, he stated. Prior to the Turman company finding production, various statements from pipe line companies had been made, but no promises were given about running Turman oil, although Sinclair had leased one 80,000-bbl. tank to Turman. Mr. Gilbert stated he thought the greatest Seminole difficulty was caused by the sudden increase of the field from 200,000 to 300,000 bbls. in a limited time and he realized that this rapid increase had inflicted many hardships upon pipe lines. At the peak of production 50 per cent of the Turman production was purchased by pipe lines and this ratio was held constant, except one day when no oil was run from the lease.

The Turman company's greatest complaint was that leases on three sides were using air and producing at full capacity while the Turman lease was curtailed. He believed air should not be used in the field until all flowing wells were handled but under questioning, admitted that Turman had an air plant already built. The only solution of the problem in his opinion was proration.

C. L. Layton, superintendent of the Tidal Oil Co. testified that removal of air would prove detrimental to the field.

**J. J. Conry's View**

J. J. Conry, Carter Oil Co.; stated Carter production is estimated at 70,000 bbls. daily of which 20,000 was shut in. By April 1 he believes all production of the field will be handled through additional pipe line facilities. The peak of 9-6 and 10-6 has been passed and the south end of Seminole City Pool is due for rapid decline but 8-6 wells will replace this loss in production of entire area and he anticipates a daily output of 300,000 to 350,000 bbls. for some time in the region. Regarding a remedy he stated it was unfair to allow flowing wells to run open and to shut in the production of wells using air system as a definite amount of air is is needed to efficiently operate each well and the only equitable solution would be to shut in all wells for varying periods.

Under questions he stated the result of removing and then replacing air was unknown for the entire field but in cases the Carter company had tried it. It was injurious to wells to substitute pumping equipment for air and would cost $4,000 per well and reduce maximum output from possibly 1,500 to 800 by swab and 200 by pump. By use of air lift an investment of $15,000 enabled producers to lift 2,000 bbls. daily against an investment of $4,000 allowing a lift of 800 bbls. daily and labor costs were to be also considered in these computations.

**Air Lift Most Efficient**

Summarizing the air lift, he said it was cheapest and most efficient method of producing oil known to the industry, and in the Seminole region wells cannot be pumped more than 24 hours without pulling, as loose sand runs into the hole and cuts cups. The Carter company has an investment of $1,000,000 in Seminole air lift.

The meeting adjourned subject to call of the commission and it is believed no further action will be taken unless additional complaints are filed by operating companies, which is extremely unlikely.

## NEW JERSEY COMPANY CURTAILS OPERATIONS

By N. O. Fanning

NEW YORK, Mar. 21.—As a result of a curtailment in its crude and cracking operations, together with the completion of a construction program, the Standard Oil Co. of New Jersey is reducing its operating and construction forces at Bayway and Bayonne, N. J., according to announcement by the company.

The announcement stated that "due to the large production of crude oil and the increased production of gasoline, the company has found it necessary to curtail the running of cracking equipment and to some extent the methods employed in running crude oil. This has resulted in a reduction of operating forces both at Bayway and Bayonne refineries. The completion of a construction program at both plants has also resulted in decreases of construction forces."

It is understood here that a general restriction of cracking operations has occurred at all Atlantic Coast refineries of the Standard oil units. Efforts are being made by these companies to reduce their operating costs to a minimum in anticipation of still lower prices. It is reported that crude from the Seminole Pool of Oklahoma will be brought to refineries here as quickly as possible and run to stills to replace the low gravity grades. The New Jersey is operating only 80 of its 180 cracking units at its New Jersey plants.

## HUMBLE OPENS POOL IN EAST TEXAS

(Continued from Page 47)

Wisdom in the Nash Pool, 12 miles north of West Columbia, is in a sand at 3,700 feet showing oil and gas. If a well is developed it means an extension of the producing limits 1,600 feet southeast. Locations have been made for Nos. 12 Nash and 14 Wisdom.

The J. M. McCarty and others' No. 1 Brown near Groesbeck, got the chalk at 2,295 feet, the highest level the chalk has ever been found at in that territory. The test is now below 2,540 feet.

### NORTH TEXAS

FORT WORTH, Tex., Mar. 22.—Phillips Petroleum Co.'s No. 1 Mason, Section 18, Block 19, extended the Noodle Creek Pool in Jones County one location to the west when it swabbed 167 bbls. the first eight hours from 2,530 feet. Same company's No. 3 Tessie, Section 19, Block 19, made 130 bbls. the first 16 hours at 2,530 feet.

In the Crane-Upton area, Humble Oil & Refining Co.'s No. 3 Ricker, Seition 6, Block R, E. C. Grooms Survey, swabbed 100 bbls. the first six hours from 2,406-13 feet, corrected steel line measurement.

### NORTH LOUISIANA

SHREVEPORT, La., Mar. 22.—Woodley and Collins and Atlantic Oil Producing Co.'s No. 2 L. & A., Section 14-23-12, Carterville area of North Bossier Parish, is standing 2,300 feet in oil and 400 feet of salt water. It is flowing 15 to 25 bbls. by heads every eight hours.

## SHREVEPORT MARKET QUOTATIONS DROPPED

SHREVEPORT, La., Mar. 21.—Reductions in Smackover crude prices the past week were reflected acutely in North Louisiana-Arkansas refinery markets. All products weakened materially under the influence of lower raw material costs, and quotations dropped sharply. Smackover, the source of much of the crude refined in this district until the past week, had weathered crude cuts and had appeared in fairly tight position with the result that when reductions came almost unexpectedly refinery markets were greatly disturbed.

Several refiners reported movement of a fair volume of gasoline in small lots for prompt shipment during the week, but Monday and Tuesday found a draggy 6½ to 6¾-cent market for the U. S. Motor (58-60 437) grade. No export order has been placed in this area for several weeks. Natural gasolines also were inactive, partly due to the fact that sellers are making no effort to dispose of their material at these low prices.

Fuel oil, gas oil and kerosenes were extremely sluggish. Refinery fuel was quoted from $1.20 to $1.25. This product possibly would have slipped off more were it not for the fact that the little made in this area generally is kept cleaned up. Smackover fuel was offered from $1.10 to $1.15. Gas oil was available as low as 3¼ cents and could not be moved easily at that figure. Kerosene quotations ranged from 5½ to 5¾ cents. The latter product is not freely manufactured by refiners here.

# WEST TEXAS WILDCATS

(Continued from Page 46)

**CRANE COUNTY**

Cromwell & Jones' No. 1 University, NW cor. SW Sec. 47, Blk. 30 — Top salt 1,015 ft.; drilling 1,800 ft.

Gulf Prod. Co.'s No. 5 Crier-McElroy, C NW NE Sec. 204, Blk. F. — Top lime 2,695 ft.; total depth 2,905 ft.; swabbed 132 bbls.

Gulf Prod. Co.'s No. 3 Crier-McElroy-A, C NE NW Sec. 198, Blk. F — Top salt 968 ft.; top lime 2,665 ft.; top pay 2,668 ft.; 500 feet oil; drilling 2,673 ft.

Gulf Prod. Co.'s No. 6 J. T. McElroy, C SW SE Sec. 197, Blk. F — Top brown lime 2,620 ft.; run 6-in. 2,640 ft.

Gulf Prod. Co.'s No. 7 J. T. McElroy, C NW SW Sec. 199, Blk. F — Flowed 57 bbls. hour 2,762 ft.

Gulf Prod. Co.'s No. 1 W. N. Waddell, NE cor. Sec. 12, Blk. B-25, School Land — Drilling 750 ft. with core drill machine.

Independent O. & G. Co.'s No. 7 Taylor, H. T. Sapp Sur., NE cor. — Drilling 3,728 ft., hard lime.

Independent O. & G. Co.'s No. 8 Taylor, H. T. Sapp Sur. — Total depth 2,417 ft.; plugged back to 2,396 ft.; testing.

McCamey & Zoch's No. 1 Cowden Brothers — Top salt 995 ft.; drilling 1,650 ft.

Prairie O. & Gas Co.'s No. 1 Colette, SW cor. Sec. 36, Blk. 31, University Sur. — Drilling 3,905 ft.

Ben D. Simon & Cromwell's No. 1 Brookfield, C SE Sec. 23, Blk. 6, H. & T. C. Sur. — Three bbls. sulphur water per hour 2,570 ft.; drilling 3,260 ft.

Texas Dev. Co.'s No. 1 Cowden — Shut down 3,820 ft.

Texas Dev. Co.'s (Cooke) No. 1 Cowden, NW NW Sec. 2, Blk. E, C. C. S. D. Sur. — Rig.

Zweifel and others' No. 1 W. H. Cowden, SE SE Sec. 16, Blk X, C. C. S. D. Sur. — Drilling 2,980 ft.

**CROCKETT COUNTY**

Anchor Oil Co. (Cumberland) No. 1 Couch, C NE Sec. 18, Blk. QR, D. & S. E. T. R. R. Sur. — Drilling 2,700 ft.

T. T. Bolin & Co.'s No. 1 P. C. Coates, NW cor. SW Sec. 4, Blk. 2, I. & G. N. Sur. — Drilling 850 ft.

Geo. A. Henshaw, Jr., No. 1 University, 1,320 feet from S and W lines SW Sec. 5, Blk. 14, University Sur. — Top salt 450 ft.; straightreaming 617 ft.

J. K. Hughes' No. 2-B Powell, Sec. 63, E. L. & R. R. Sur. — Fishing for 18 joints 8-in.; total depth 2,535 ft.

Magnolia Pet. Co.'s No. 2 Shannon, SE SE Sec. 9, Blk. BB, E. L. R. R. Sur. — Hole full sulphur water 2,390 ft.; drilling 3,000 ft.

William Shaffer and others' No. 1 University, C SE SE Sec. 9, Blk. 47, University Sur. — Total depth 2,344 ft.; plugged back to 2,208 ft.; shot 10 qts 2,170-95 ft.; shut down.

W. W. Donnelly, Young, Logan & Hult 's No. 1 Pierce, C SW Sec. 150, Blk. O. G. H. & S. A. Sur. — Rainbow show 454 ft.; fishing tools 475 ft.

P. H. Williams' No. 1 L. P. Lowell — Rigging up.

World Oil Co.'s No. 1 Schneeman, N and W SE cor. Sec. 57, Blk. BB, G. C. & S. F. Sur. — Top salt 1,035 ft.; drilling 2,430 ft.

J. D. Young & Cromwell's No. 1 Shannon, SE NE Sec. 4, Blk. 10 — Hole full sulphur water 2,550 ft.; shut down 3,012 ft., contract depth; plugging to abandon.

Young & Cromwell's No. 1 University, C SE Sec. 23, Blk. 31, Univ. — Pay 1,160-65 ft.; shows at 1,505 and 1,574 ft.; fishing for tools 1,[illegible]45 ft.

**CROSBY COUNTY**

El Capitan Oil Co.'s No. 1 O. L. Slaton, NW cor. SW Sec. 5, Blk. B-9, E. L. & R. R. Sur. — Drilling 2,855 ft.

**CULBERSON COUNTY**

James H. Gardner and others' No. 1 Radford, C SE Sec. 29, Blk. 62, Pub. Sch. Ld. Sur. — Spudded 275 ft. and shut down.

**DICKENS COUNTY**

Bowser Mickels and others' No. 1 Pitchford ranch — Shut down 3,250 ft., contract depth; may deepen.

Moutray Oil Co. and Clancey & English's No. 1 Blackwell, C SE Sec. 406, Blk. 1, H. & G. N. Sur. — Shut down 3,509 ft.

Moutray Oil Co. and Clancey & English's No. 1 Jones, SE cor. NW, Sec. 311, Blk. 1, H. & G. N. Sur. — Shut down 3,550 ft.; to deepen.

**ECTOR COUNTY**

J. S. Cosden, Inc., et al's No. 2 Connell-A, NW cor. NE Sec. 13, Blk. B-16, School Land — Rig; moving in tools.

**FISHER COUNTY**

Sinclair Oil & Gas Co.'s (was Bourbon Royalty Co.'s) No. 1 J. A. Danise, Sec. 6, Blk. K, T. & P. Sur. — Rigging up.

Marland Oil Co.'s (was Caldwell and others') No. 1 Rochelle, SW cor. NE Sec. 184, Blk. 3, T. & P. Sur. — Shut down for casing 3,139 ft.

Marland Oil Co. and Texon's No. 1 McCall — Location.

California Co.'s No. 1 R. G. Anderson, Sec. 22, Blk. 20, T. & P. Sur. — Hole full sulphur water 2,500 ft.; salt water 2,801-12 ft.; total depth 3,060 ft.; underreaming.

California Co.'s No. 1 Maggenheimer, SE cor. SW Sec. 15, Blk. 1, H. T. & B. Sur. — Hole full sulphur water 2,826-2,937 ft.; hole full water 2,975-3,000 ft. and 3,055-70 ft.; drilling 3,090 ft.

Danciger Oil & Refg. Co.'s (F. P. Zoch and others') No. 1 Lanius, NE cor. SE Sec. 15, Blk. Y, P. T. & P. Sur. — Drilling 2,960 ft.

Hucony Gas Co.'s No. 1 Langford, SW SW Sec. 7, Blk. 21, T. & P. Sur. — Small show oil 2,350 ft.; drilling 2,475 ft.

Barber Oil Co.'s (was Mason Oil Co.'s) No. 1 W. A. Cross. — Drilling second hole 875 ft.

R. W. Raney's No. 2 Maberry — Shut down for orders 2,725 ft.

Fred Phillips' No. 1 C. M. Webb, 756 ft. S and 1,050 ft. W NE cor. Sec. 2, Blk. K — Hole full salt water 2,220-40 ft.; drilling 2,660 ft.

Stearns & Streeter's No. 1 W. A. Howe, N and E SW cor. N ESec. 12, Blk. 23, T. & P. Sur. — Shut down for water 2,450 ft.

F. P. Zoch and others' No. 1 R. M. Clayton, C of W 160 ac. of irregular Sec. 1, J. W. Posey Sur. — Odor gas 2,681-2,707 ft.; hole full salt water 2,712-55 ft.; sulphur water 3,090 ft.; show gas in black lime 3,128-32 ft.; black and gray lime 3,152-55 ft.; rainbow snow and strong smell gas.

**FOARD COUNTY**

Humble O. & R. and Navarro Oil Co.'s No. 1 L. McAdams, C S ½ Sec. 27, Blk. L, S. P. Sur. — Drilling 2,150 ft.

**GARZA COUNTY**

Emerald Oil Co.'s No. 1 D. Boren, NW cor. NE Sec. 137, Blk. 5, H. & G. N. Sur. — Drilling 1,050 ft.

Pandem Oil Co.'s No. 1 Justice, SW cor. NW Sec. 2, Blk. 6, H. & G. N. Sur. — Rig.

**GLASSCOCK COUNTY**

Green et al's No. 1 F. G. Oxsheer — Rig.

J. S. Meriwether's No. 1 L. S. McDowell, C SW Sec. 43, Blk. 34, Twp. 2-S, T. & P. Sur. — Location.

R. R. Penn et al's No. 1 W. P. Edwards, C SE Sec. 11, Blk. 34, Twp. 2-S, T. & P. Sur. — Location.

Plateau Oil Co.'s No. 1 L. S. Bell, C SW Sec. 11, Blk. 35, T. & P. Twp. 5-S Sur. — Top lime 2,930 ft.; drilling 3,060 ft.

Texon Oil & Land and Marland Oil Co.'s No. 1 W. R. Settles, Sec. 160, Blk. 29, W. & N. W. Sur. — 1,000 ft. oil 1,235-63 ft.; set 10-in. with two perforated joints at 1,245 ft.; putting on pump.

**HALL COUNTY**

Seifert and others' No. 1 Owens, C NE Sec. 179, Blk. S-5, Dennison & Pacific Sur. — Spudded and shut down.

**HOCKLEY COUNTY**

El Capitan Oil Co.'s No. 1 Ellwood, SW cor. Sec. 55, Blk. A, R. M. Thompson Sur., 18 miles NW of Lubbock. — Skidded rig; fishing 550 ft.

**HOWARD COUNTY**

Bowers et al's No. 1 Chester Jones, C SW Sec. 32, Blk. 27, T. & P. (3,200-ft. test) — Spudded and shut down.

Bristow & Merrick's No. 1 A. J. Hooks — Drilling 1,610 ft.

Bristow & Merrick's No. 2 A. J. Hooks — Building rig.

Fred Carey et al's No. 1 G. O. Chalk, SE NW Sec. 124, Blk. 29 — Drilling 250 ft

Comet Pet. Co.'s No. 1 H. R. Clay, S and E NW cor. Sec. 154, Blk. 29, W. & N. W. Sur. — Testing oil show 1,815 ft.

Dixie Oil Co.'s No. 1 H. R. Clay, S and E NW cor. Sec. 154, Blk. 29, W. & N. W. Sur. — Drilling 1,180 ft.

Francis & Brunson's No. 1 J. W. Furrh, C SW Sec. 11, Blk. 31, T. & P. Sur., T-1-S — Location.

Marland Oil Co.'s No. 1 J. B. Harding, C SE Sec. 19, Blk. 33, T. & P. Sur. — Rotary; drilling in salt 1,300 ft.

Marland Oil Co.'s No. 1 Bryse, C SW Sec. 35, Blk. 34, T. & P. Sur., Tp. 1-S — Hole full salt water 3,265-85 ft.; drilling 3,450 ft.

L. C. Harrison et al's No. 1 Dora Roberts — Spudded and shut down.

**KNOX COUNTY**

Deep Rock Oil Co.'s No. 1 Jones, CSL Sec. 111, Blk. C, H. & T. C. Sur. — Drilling 2,040 ft.

Deep Rock Oil Co.'s No. 1 Beavers, CSL Sec. 224, Blk. 44, elev. 1,441 ft. — Drilling 1,650 ft.

Deep Rock Oil Co.'s No. 1 Big Four, 1,270 ft. south and 2,590 ft. west of NE cor. Sec. 31, Blk. 4 — Rigging up.

Humble O. & R. Co.'s No. 1 Goode — Building rig.

**IRION COUNTY**

Cash Dollar et al's No. 1 Abe Mayer, C NE Sec. 1, Blk. 10, S. P. R. R. Sur. — Drilling 2,165 ft.

Cash Dollar et als No. 1 G. J. Bird, NE Sec. 16, Blk. 10, S. P. R. R. Sur. — Shut down 950 ft.

**JEFF DAVIS COUNTY**

Humble O. & R. Co.'s No. 1 Crecencio Flores — Location.

T. A. Hughes Dev. Co.'s No. J. Z. Means, 600 ft. from N line and 2,000 ft. from W line of M. Robinson Sur. No. 1 — Shut down 1,700 ft.

**JONES COUNTY**

Atlantic O. P. Co. and Landreth's No. 2 Howell — Fishing 1,095 ft.

Bateman & Campbell's No. 1 Southard, C NW NW Sec. 43, Deaf & Dumb Asylum Lands — Shut down for water 1,790 ft.

Campbell et al's No. 1 L. H. Herndon, Sec. 6, M. E. P. & P. Sur. — Shut down 1,860 ft.

Consolidated Oil Co.'s No. 1 Armand & Taylor, C S½ SW Sec. 7, Blk. 4, H. & T. C. Sur. — Drilling 1,040 ft.

Garland & Diamond's No. 1 E. D. Glynn, SE cor. Sec. 18, Deaf & Dumb Asylum Lands — Location

Gault Brown et al's No. 1 Mrs. A. Zips — Moving in rig.

Gibson & Johnson's No. 1 Largent, C SE Sec. 50, Blk. 149, Dewitt Co. School Land — Shut down 2,390 ft.; underreaming 8-in.

Gillette & Hickey & Cowboy Evans' No. 1 S. W. King, Manuel Bueno Sur., No. 197 — Good show oil 2,070 ft.; no gas; swabbed 25 bbls.; swabbing dry, 50 ft. fluid in hole; underreaming 5-in.

Gillette & Hickey's No. 1 M. E. Young, Tevanio Sur. No. 190. — Shut down 1,200 ft.

Grisham & Hunter & Wildman's No. 1 George B. Birchfield, Harrison Co. School Land — Rainbow showing 2,758-65 ft., 2,815-25 ft. and 2,860-70 ft.; shut down for underreamer 2,960 ft.

Grisham & Hunter & Wildman's No. 1 Williams, Harrison Co. School Land — Two bailers oil brown sand 2,620-40 ft. through 50 ft. cavings.

Hart & Cole's No. 1 Cranston, Sec. 10, Blk. 17, T. & P. Sur. — Hole full salt water 2,650 ft.; Total depth 2,700 ft.; underreaming.

Hurley Oil Co.'s No. 2 John Sears — Shut down for repairs 1,330 ft.

Hutson & Weaver's No. 1 Smith, Sec. 51, Blk. 18, T. & P. Sur. — Fishing tools 505 ft.

Mariand Oil Co.'s No. 1 Larson, C SE NE Sec. 188, B. B. D. & C. Sur. — Drilling 1,660 ft.

Marston Oil Co.'s No. 1 E. Crowell, NW cor. SE W ½ of N 400 ac., Sec. 20, Blk 19, T. & P. Sur. — Total depth 2,185 ft.; fishing underreamer lugs.

Marston Oil Co.'s No. 1 J. S. Swan, Robt. Spears Sur. No. 280 — Rig.

Mid-Continent Petroleum Corp.'s No. 1 H. Evans, NE cor. SE SE Sec. 44, S. P. R. R. Sur. — Shut down for water 1,875 ft.

Midwest Exploration Co.'s No. 3 Thornton, Sec. 18, Blk. 9, T. & P. Sur. — Drilling 2,005 ft.

Midwest Exploration Co.'s No. 4 Thornton — Drilling 2,240 ft.

McLester et al's No. 1 Will Myatt, Sec. 10, James Wardfield Sur. — Small show oil and water 1,652-60 ft.; drilling 1,810 ft.

Victor H. Martin's No. 1 Culbertson, Vincent Bell Sur., No. 6. — Drilling 3,115 ft.

Muse & Robertson & Cowboy Evans' No. 1 Manly, C S½ S½ Sec. 35, Blk. 14, T. & P. Sur. — 250,000 ft. dry gas, no oil 1,640 ft.; drilling 2,034 ft.

Phillips Pet. Co.'s No. 1 Mason, N and W SE cor. NE Sec. 18, Blk. 19 — Drilling 2,476 ft.

Phillips Pet. Co.'s No. 1 Thornton — Six bbls. water 1,930-45 ft.; fishing 2,809 ft.; missed pay.

Phillips Pet. Co.'s No. 3 Walling, N and E SW cor. Sec. 19, Blk. 19, T. & P. Sur. — Drilling 2,350 ft.

Phillips No. 3 Joe Winters — Rig.

Shaw & Rathke and others' No. 1 Bristow, SE SE Sec. 1, J. H. Gibson Sur. — Shut down 500 ft.

W. G. Stough and others' No. 1 J. P. Willis — Shut down 730 ft.; repairing spudder.

Stebbins Oil Co.'s No. 1 J. M. Higgs — Drilling 975 ft.

Swensondale Oil Co.'s No. 1 Caton, SW NW Sec. 9, Deaf and Dumb Asylum Lands — Spudding.

Tomberlin et al's No. 1 Oscar Clapp — Moving in rig.

World Oil Co. and others' No. 1 A. W. Clark, SE cor. Sec. 15, Blk. 19, T. & P. Sur. — Hole full salt water 1,975-2,010 ft.; more salt water 2,305 ft.; slight show oil 2,425-36 ft. and 2,660-70 ft.; shut down for repairs 2,710 ft.

World Oil Co.'s No. 1 W. H. Lee, 5,400 ft. N and 2,300 ft. E of SW cor. J. W. McKissick Sur. — Drilling 1,875 ft.

Zeigler and others' No. 1 Reeves, C SE SE Sec. 164, B. B. B. & C. Sur. — Drilling 1,350 ft.

**KENT COUNTY**

Douglas Oil Co.'s No. 1 Scoggins — Rig.

**KIMBLE COUNTY**

Dixie Oil Co.'s No. 1 Harrison, 900 ft. N NE 40 cor. S 300 ft., No. 80 Sur. — Shut down 3,035 ft.

**KING COUNTY**

Hoffer Oil Co.'s No. 1 F. Patton — Shut down 1,275 ft.

**LAMB COUNTY**

E. C. Marrs et al's No. 1 Yellowhouse, N line Labor 3, League 697, State Capitol Lds. — Salt water 4,210-25 ft.; plugged and abandoned 4,240 ft.

**LOVING COUNTY**

Kingwood Oil Co.'s No. 1 T. O. Moore — Location.

**LUBBOCK COUNTY**

Sam Arnett and others' No. 1 Bowles Ranch — Set 20-in.; total depth 350 ft.

**LYNN COUNTY**

The Hart Oil Corp.'s No. 1 C. O. Edwards, NW NW Sec. 5, Blk. 2 — Shut down 1,400 ft.

**MENARD COUNTY**

J. R. Lewis and others' No. 1 White, C NW Sec. 8, J. Mabrey Sur. — Shut down 415 ft.

Clark and others' No. 1 Kothman, NW NW Sec. 77, Kulman Sur. — Shut down 580 ft.

**MITCHELL COUNTY**

Eastland Oil Co.'s No. 2 C. M. Adams — Drilling 2,235 ft.

California Co.'s No. 1 W. H. Butler, Lease 2 — Drilling 2,760 ft.

California Co.'s No. 1 E. Morrison, Lease 1 — Drilling 1,325 ft.; hole full salt water.

Teas & Stivers' No. 1 Hardee, SE SE Sec. 85, Blk. 97, H. & T. C. Sur. — Six-bbl. show 3,070-3,102 ft.; drilling 3 425 ft.

Texas & Stivers' No. 1 Dowlin, NW cor. Sec. 11, Blk. 27, T. & P. Sur. ..... Rig.
B. H. Cogdell's No. 1-C F. E. McKenzie, WL NW NE Sec. 226, Blk. 1-A, H. & T. C. Sur. ..... Shut down 125 ft.
Robert Thraves' No. 1 C. Way ..... Rig.
Paul Teas' No. 1 Ed Strain ..... Drilling 470 ft.
Morrison & Thompson's No. 1 Griffith, SE SE Sec. 45, Blk. 29, T. & P. Sur. ..... Total depth 2,350 ft.; set 6-in.
B. E. Walter and others' No. 1 J. E. Dollen, NW cor. SW Sec. 11, Blk. 27, T. & P. Sur. ..... Drilling 3,350 ft.
J. C. Yancey's No. 1 Saunders, 400 ft. N and 1,700 ft. E of SW cor. Sec. 25, Blk. 25, T. & P. Sur. ..... Spudded and shut down.

**MOTLEY COUNTY**

Chechaco Oil Co.'s (J. W. Pennington et al of Amarillo) No. 1 J. W. Owens, NW cor. Sec. 26, Blk. 4 (15,000-acre solid block) ..... Shut down 1,050 ft.
Wheeler et al's No. 1 C. D. Bird, C NE Sec. 4, Blk. S, Stephens Sur. ..... Rig on ground.

**NOLAN COUNTY**

A. G. Malone et al's No. 1 J. B. Carlyle ..... Location.
A. G. Malone et als No. 1 M. C. McElmurry ..... Rigging up.
J. H. Winemiller Corp.'s (was Peters et al's) No. 1 Booth .. Set 15-in. 700 ft.
Stein & Greeben's No. 1 L. W. Ross ..... Location.
Thomas & Reynold's No. 1 Allen, C W ½ NW Sec. 58, Blk. X, T. & P. Sur. ..... Drilling 840 ft.
Walford et al's No. 1 H. D. Simpson ..... Location.
Herbert Oil Co.'s (was McClesky and others') No. 1 Pepper, SE cor. SW Sec. 29, Blk. 22, T. & P. Sur. .... Rig on ground.
Phillips Pet. Co.'s No. 1 Scott, Sec. 58, Blk. 21, T. & P. Sur. ..... Rig.
Zweifel and others' No. 1 Longbotham, C SE Sec. 130, Blk. 1, H. & G. N. Sur. ..... Run. 12-in. 915 ft.

**PARMER COUNTY**

Humble O. & R. Co.'s No. 1 Farwell ..... Total depth 1,275 ft.; rebuilt rig; rigging up.

**PECOS COUNTY**

Arkansas Fuel Co.'s No. 1 H. Holmes, 2,040 ft. north and 1,520 ft. west SE cor. Sec. 16, Blk. 178, T. C. R. R. Sur. ..... Spudding 100 ft.
Benedum & Trees' No. 1 J. C. Trees, C Sec. 50, Blk. 8 .... Shut down 3,110 ft.
Buell and others' No. 1 Hagan, C N half NE Sec. 89, Blk. OW, G. C. & S. F. Sur. ..... Show oil 1,700 ft.; cement. pipe 1,775 ft.
Buell & Hagan's No. 1 McKenzie Sec. 3, Blk. 604, Mrs. A. L. Canon Sur. ..... Rig.
Buell & Hagan's No. 1 University, C N ½ SE Sec. 31, Blk. 24. ..... Bailed 1½ bailers live oil 2,460 ft.; shut down for drill line 2,630 ft.
Buell & Hagan's No. 1 Jasper, 1 mile south and west NE cor. Jasper Co. School Land No. 104 ..... Location.
California Co.'s No. 1 Union Land Co., 1,650 ft. N and 990 ft. E of most northerly SW cor. Sec. 8, Blk 110, T. C. R. R. Sur. ..... Drilling 660 ft.
Cromwell & Kimberlin's No. 1 Blackman, C NW Sec. 24, Blk. 3, H. & T. C. Sur. ..... Top salt 890 ft.
Crosby Drilling Co.'s No. 1 O. G. Yates, Sec. 70, Blk. 1, I. & G. N. Sur. ..... Small show oil 880-85 ft.; flat hole.
Kirby Oil Co.'s No. 1 Rheinstrom, C NE SW Sec. 30, Blk. 2, H. & T. C. Sur. ..... Top salt 830 ft.; drilling 1,245 ft.
Del Rio Drilling Synd.'s No. 1 K. C. & Ft. Stockton, C SW Sec. 19, Blk. 178, T. C. Sur. ..... Shut down 740 ft.
Garland & Mott's No. 1 El Paso Cattle Loan Co., C NE Sec. 26, Blk. 126, T. & S. L. Sur. ..... Location.
Kershaw & Livingston's No. 1 Cannon, SW cor. NE Sec. 54, Blk. A-2, T. C. R. R. Sur. ..... Location (corrected).
Mid-Kansas O. & G. Co.'s No. 1 Smith Taylor ..... Location.
Mid-Kansas O. & G. Co.'s No. 3 Yates, W of SW cor. Sec. 60, Blk. 1, I. & G. N. Sur. and loc. in J. Yates Sur. ..... Top lime 992 ft.; flowed 600 bbls. 1,000-73 ft.
Quinby Oil Co.'s No. 1 Townsite, Sec. 1, Blk. 267, Client Addition Sur. Ft. Stockton ..... Shut down for casing 3,440 ft.
Quinby Oil Co.'s No. 1 Bennett, C NW 592, Blk. 105, G. C. & S. F. Sur. ..... 200 ft. oil in hole from 1,216 ft.; shot 20 qts. 1,208-20 ft.; drilling 1,380 ft.
Quinby Oil Co.'s No. 1 A. A. Gray, 660 ft. north and 1,320 feet west SE cor. Sec. 593, Abst. 3,009 ..... Drilling 175 ft.
Texon O. & L. Co.'s No. 1 I. G. Yates, C Sec. 55, Blk. 1, I. & G. N. Sur. ..... Swabs 30 bbls. 1,268-1,300 ft.
Texon O. & L. Co. and Marland Oil Co.'s No. 1 Blakesley .. Building rig.
John Droppiemann's No. 1 Mrs. L. Hershenson, Sec. 7, Blk. 51, T. & P. Sur., T-10 ..... Straightening hole 160 ft.

**REAGAN COUNTY**

The Texas Co.'s No. 2 J. D. Sugg, C Sec. 87, Blk. 2, T. & P. Sur. ..... Top salt 860 ft.; drilling 1,400 ft.

**REEVES COUNTY**

Deep Rock Oil Co.'s No. 1 Caldwell, C SW Sec. 22, Blk. 58, T. & P. Sur., Twp. 8 ..... Drilling 1,980 ft.
Exploration Co.'s No. 1 A. A. Kinney ..... Spudded 20 ft. and shut down.
Humble Oil & Ref. Co.'s No. 1-B Kloh, C NE Sec. 47, Blk. 56, T. & P. Sur. T-2-S ..... Fishing 1,380 ft.
World Oil Co.'s No. 1 Biggs, C SE Sec. 65, Blk. 112, Pub. Sch. Ld. Sur. ..... Total depth 1,810 ft.; skidded rig.

**RUNNELS COUNTY**

Associated Pet. Co.'s (was Bell & Moore's) No. 1 W. W. King, 1,200 ft. W of NE cor. Lge. 14, J. V. Cobrera Sur. ..... Spudded and shut down.
Moore & Bell's No. 1 Ferguson, 2,640 ft. S and 1,320 ft. E of NW cor. F. J. Ford Sur. No. 152 ..... Spudded and shut down.
Lou Ladd et al's (was Frank Yates') No. 1 R. M. McMillan ..... Spudding 150 ft.

**SCHLEICHER COUNTY**

Beavers & Leath and others' No. 1 J. A. and W. T. Whitten, C NW Sec. 35, Blk. 11, T. O. Sur. ..... Spudded and shut down
Thomas Grey et al's No. 1 Ball Robinson, C NW Sec. 25, Blk. M, G. H. & S. A. Sur. ..... Spudded and shut down; drilling water well.

**SCURRY COUNTY**

Northwest Co.'s No. 1 T. C. Stinson, NE NW SW Sec. 101, Blk. 97, H. & T. C. Sur. ..... Tested 8 bbls. 1,745 ft.; another pay at 3,402-07 ft.; bailed 70 bbls. oil in 4 hours and bailed dry; shut down for drilling line 3,860 ft.

**STERLING COUNTY**

J. P. Williams' No. 1 Clark, NE NE SW Sec. 7, Blk. 8, G. C. & S. F. Sur. ..... Drilling 780 ft.

**STONEWALL COUNTY**

McCamey & Zoch's No. 1 J. W. Ward ..... Moving in material.

**TAYLOR COUNTY**

City of Abilene's No. 1 fee, NW SW SE Sec. 66, Lunatic Asylum Land ..... Shut down 2,264 ft.
Dorning & Perrine's No. 1 J. A. Hammer, center N 100 ac., Sec. 23, Blk. 19, T. & P. Sur. ..... Spudding 175 ft.
Oil Operators Trust Co.'s (was Gibson & Johnson's) No. 1 Haines & Hamilton, NE cor. W ½ SE Sec. 38 ..... Drilling 2,270 ft.
Gibson & Johnson's No. 1 Hendry ..... Location.
Grisham & Hunter's No. 1 D. D. Huddleston, CWL Lot 29, League 146, Grimes Co. School Land ..... Drilling 2,240 ft.
W. E. Halbert et al's No. 1 Hunt, C SE Sec. 124, Blk. 64, H. & T. C. Sur. ..... Drilling 780 ft.
Humble O. & R. Co.'s No. 1 Mattie Jacobs ..... Rig.
Midwest Expltn. Co.'s No. 1 Dora Smith, Jose Gabo Sur. .. Shut down 1,520 ft.
Midwest Expltn. Co.'s No. 1 Toombes, Alex Thompson Sur. No. 37 ..... Shut down 1,650 ft.
Mitchell & Breene's No. 1 Tittle ..... Location.
Morrison & Thompson's (was Noodle Creek Oil Co.'s) No. 1 Mrs. Alice Rose, SW cor. NE Sec. 29, Blk. 19, T. & P. Sur. ..... Drilling 550 ft.
Owen & Sloan's No. 1 Lattimer ..... Rigging up machine.
Roeser & Pendleton's No. 1 Sam Hutman, C W ½ NW Sec. 64, Blk. 5, T. & P. Sur. ..... Drilling 600 ft.
Sanger O. & R. Co.'s No. 1 Ike Brown NE cor. Sec. 54, Blind Asylum Land ..... Shut down 1,870 ft.
Sanger Oil & Refining Co.'s No. 1 Gillespie, Sec. 7, Lunatic Asylum Land ..... Drilling 3,860 ft.
World Oil Co.'s No. 1 J. R. Griffith ..... Building rig.

**TERRELL COUNTY**

E. T. Williams and others' No. 1 Robertson, C NE Sec. 71, Blk. D-10, T. C. Sur. ..... Shut down for casing 2,800 ft., hole full of water.
Big Bend Oil Co.'s No. 1 Bassett, C NW Sec. 155, Blk. D, M. K. T. Sur. (22 miles northeast of Sanderson) .. Location.

**TERRY COUNTY**

Kingsland Oil & Potash Co.'s No. 1 Brownsfield, C NW SW SW Sec. 7, Blk. 1-A, E. L. R. R. Sur. ..... Shut down 1,050 ft.

**TOM GREEN COUNTY**

Fitzgerald et al's No. 1 Bennett ..... Location.
Marland Oil Co.'s No. 1 Llano ..... Drilling 490 ft.

**UPTON COUNTY**

Beaty et al's No. 1 J. F. Lane ..... Top salt 880 ft.; drilling 1,400 ft.
W. W. Donnelly and others' No. 1 University, C SW Sec. 21, Blk. 4, University ..... Top salt 1,560 ft.; drilling 1,870 ft. in salt.
Gulf Production Co.'s No. 1 J. T. McElroy-B, C SW NE Sec. 187, Blk. F. ..... Top salt 1,220 ft.; drilling 1,375 ft.
Hults and others' No. 1 Giddings, C NW Sub. Sec. 12, Throckmorton Co. School Land ..... Top salt 1,515 ft.; shut down 3,310 ft.; contract completed.
Humble O. & R. Co.'s No. 3 Ricker ..... Top salt 725 ft.; drilling 1,750 ft.
Humble O. & R. Co.'s No. 4 Ricker ..... Spudding.
Marland Oil Co.'s No. 3 Burleson, T. C. Jones Sur. No. 100. First pay 2,205 ft.; second pay 2,295 ft.; 2,000 ft. sulphur water 3,390-95 ft.; drilling 4,207 ft.
Marland Oil Co.'s No. 34 Burleson, Sec. 100, T. C. Jones Sur. ..... Shut down 3,255 ft.
Marland Oil Co.'s No. 3 Benton Land, Julia Prater Sur. No. 1 ..... Second hole; drilling 290 ft.
Sartain & Davis No. 1 Bull, SW NE Sec. 48, Blk. 41, T. & P. Sur. ..... Rig burned 3,290 ft.; rebuilding.
The Texas Company's No. 28 King ..... Top salt 512 ft.; drilling 526 ft.

**VAL VERDE COUNTY**

A. Blume and others' No. 1 Moore estate, Sec. 183, J. Mitchell Sur. ..... Shut down 3,000 ft.
Curso Williams' No. 1 Holman, NE NE Sec. 5, Blk. N, G. H. & S. A. Sur. ..... Shut down 2,270 ft.
Douglas Oil Co.'s No. 1 Sellars, C SE Sec. 82, Blk. A, I. & G. N. Sur. ..... Shut down 2,210 ft.
East Del Rio Oil Co.'s No. 1 Russell, E. cor. Sec. 183, Del Rio Town Sur. ..... Shut down 3,142 ft.
Hiawatha Oil Co.'s No. 1 Sellars, C Sec. 1,031, Blk. A, I. & G. N. Sur. ..... Hole full salt water 2,455 ft.; drilling 2,502 ft.
Independent Operators' No. 1 Whitehead, SE SE Sec. 30, Blk. 4, I. & G. N. Sur. ..... Shut down 3,775 ft.
O. O. Owens' No. 1 Mills ..... Shut down 820 ft.
Transcontinental Oil Co.'s No. 1 W. S. Stevenson, NE SE NE Sec. 3, Blk. 4, I. & G. N. Sur. ..... Shut down 4,280 ft.

**WARD COUNTY**

Marland Oil Co.'s No. 1 J. Sealey, C SE Sec. 78, Blk. A, G. M. M. & A. Sur. ..... Hole full fresh water 970-80 ft.; top salt 1,100 ft.; drilling 1,150 ft.

**WINKLER COUNTY**

White Eagle O. & R. Co.'s (was Gibson & Johnson's) No. 1 R. A. Lock, 1,320 ft. west of NE cor. Sec. 30, Blk. 74, northwest of discovery well ..... Location.
Gulf Prod. Co.'s No. 1 T. G. Hendricks, NW cor. Sec. 34, Blk. B-5, Pub. Sch. Ld., elev. 2,801 ft. ..... Top salt 1,665 ft.; show gas 2,551-58 ft.; top lime 2,538 ft.; drilling out cement 2,690 ft.
Champlin Drilling Co.'s No. 1 C. W. Cowden C SW Sec. 21, Blk. C-23, Pub. Sch. Ld., elev. 2,889 ft. ..... Total depth 900 ft.; shut down.
McCullough Oil Co.'s No. 1 Tobe Morton, CEL Sec. 20, Blk. B-12, Pub. Sch. Ld. ..... Shut down 1,115 ft.
R. S. Matthews and others' No. 1 State, C Sec. 7, Blk. A-57, Pub. Sch. Ld. Sur., elev. 3,120 ft. ..... Skidding rig.
Independent Oil & Gas Co.'s No. 1 Hendricks, Sec. 42, Blk B-5, Pub. Sch. Ld. ..... Drilling 1,550 ft.
F. P. Zoch and others' No. 1 John Sealy, C SW Sec. 73, Blk. A, G. M. M. & A. Sur., elev. 2,709 ft. ..... Top salt 1,062 ft.; top lime 2,780 ft.; 150 ft. oil 3,218-1714 ft.; 2,800 ft. salt water 3,268 ft.; drilling 3,765 ft.
L. D. Ladd, Hill and others' No. 1 Amburgey, C Sec. 24, Blk. B-7, Pub. Sch. Ld. Sur., elev. 3,033 ft. ..... Top salt 1,220 ft.; shut down 3,305 ft., contract depth; will deepen.
Pure Oil Co.'s No. 1 Hendricks, SW cor. Sec. 41, Blk. B-5, Pub. Sch. Ld. ..... Location.
Skelly Oil Co.'s No. 1 M. M. Leeman, 1,320 ft. east of SW cor. Sec. 21, Blk. 75 (near Loving Co. line) ..... Drilling 600 ft.
Southern Crude Oil Purchasing Co.'s No. 1-C (was No. 2) Hendricks, NE cor. Sec. 33, Blk. B-5, Public School .. Rotary; top salt 1,910 ft.; set 8-in. 2,505 ft.; standardizing.
Southern Crude Oil Purchasing Co.'s No. 2-C (was No. 3) Hendricks, Sec. 33, Blk. B-5 ..... Drilling 1,670 ft.
Llano Oil Co.'s No. 1 Scarborough, center Sec. 1, Blk. C-22, Pub. Sch. Ld., elev. 2,921 ft. ..... Top salt 1,115 ft.; hole full water 1,321 ft.; drilling 1,765 ft.
Group 1 Humble O. & R. Co.'s No. 1 T. G. Hendricks, C SE Sec. 36, Blk. 27 ..... Water well completed.
Humble O. & R. Co.'s No. 1 T. G. Hendricks, S and W NE cor. W ½ NE Sec. 33, Blk. B-5, Public School Land ..... Rig.
Southern Crude Oil Pur. Co.'s No. 3-C Hendricks, SE cor NE Sec. 33, Blk. B-5 ..... Building rig.

## WILDCAT OPERATIONS IN PANHANDLE

(Continued from Page 48)

Prairie O. & G. Co.'s No. 2 J. W. McConnell-A, NE cor. SE Sec. 67, Blk. 4 ..... Drilling 1,500 ft.
Prairie O. & G. Co.'s No. 3 J. W. McConnell-A, NE cor. NW SE, Sec. 67, Blk. 4 ..... Drilling 1,500 ft.
Prairie O. & G. Co.'s No. 4 J. W. McConnell-A, SE cor. Sec. 67, Blk. 4 ..... Drilling 650 ft.
Prairie O. & G. Co.'s No. 1 J. W. McConnell-B, SW cor. E ½ NE Sec. 67, Blk. 4 ..... Drilling 1,200 ft.
Prairie O. & G. Co.'s No. 2 J. W. McConnell-B, SE cor. NE Cec. 67, Blk. 4 ..... Drilling 2,250 ft.
Prairie O. & G. Co.'s No. 1 F. E. Percival, NW cor. W ½ NW Sec. 199, Blk. 3 ..... Drilling 650 ft.
Prairie O. & G. Co.'s No. 2 F. E. Percival, NE cor. W ½ NW Sec. 199, Blk. 3 ..... Drilling 450 ft.
Republic Prod. Co.'s No. 1 Burnett, Sec. 116, Blk. 4 ..... Show oil 3,025-32 ft., lime and granite wash; drilling 3,085 ft.
Roxana Pet. Corp.'s No. 1 E. F. Bryan-C, Sec. 107, Blk. 4 .. Drilling 3,110 ft.
Roxana Pet. Corp.'s No. 1 Brown, Sec. 106, Blk. 4 ..... Drilling 2,230 ft.
Roxana Pet. Corp.'s No. 2 Brown, SE cor. Sec. 106, Blk. 4 ..... Drilling 2,445 ft. (corrected).
Skelly Oil Co.'s No. 1 H. Schafer, SW cor. N ½ Sec. 198, Blk. 3 ..... Drilling 1,980 ft.
Skelly Oil Co.'s No. 2 H. Schafer, NW cor. NE Sec. 87, Blk. 4 ..... Drilling 1,400 ft.
Skelly Oil Co.'s No. 3 H. Schafer, NW cor. NE Sec. 86, Blk. 4 ..... Drilling 700 ft.
Skelly Oil Co.'s No. 4 H. Schafer, NW cor. Sec. 86, Blk. 4 .. Drilling 800 ft.
Stubblefield et al's No. 1 E. Cooper, SW cor. NE Sec. 5, Blk. 9, I. & G. N. Sur. ..... Rig.
The Texas Company's No. 1 C. A. Noel, Sec. 26, Blk. 4 .... Show gas 2,275 ft.; drilling 2,315 ft.
The Texas Company's No. 1 J. L. Noel, Sec. 187, Blk. 3 ... Drilling 2,900 ft.

The Texas Company's No. 1 J. C. McConnell, NE cor. Sec. 66, Blk. 4 ..... Standardizing 2,415 ft.
Vitek Oil Co.'s No. 1 J. H. Eller, NE cor. NW Sec. 200, Blk. 3 ..... Location.
Vitek Oil Co.'s No. 1 C. R. Garner, SW cor. Sec. 113, Blk. 4, I. & G. N. Sur. ..... Spudding.
White Deer Oil Co.'s No. 2 Jordan-Brown, Sec. 104, Blk. 4.. Drilling 2,270 ft.

**CHILDRESS COUNTY**

Brookins et al's No. 1 Mrs. Givens, 600 feet N and W of SE cor. Sec. 676, W. & M. W. Sur. ..... Rigging up.
C. L. Sloane et al's No. 1 B. P. Smith, Sur. 49, F. P. Knott lands ..... Fishing 1,300 ft.

**COLLINGSWORTH COUNTY**

Duke & Langford's No. 1 Martha Johnson, Sec. 97, Blk. 22.. Drilling 2,000 ft.
Harmon & Deems' No. 1 Wilson (Scott), Sec. 44, Blk. 21.. Location.
Martin et al's No. 1 T. V. Norwood, Sec. 30, Blk. 16..... Spudded and shut down.
Wischkamper's No. 1 fee, C SE Sec. 93, Blk. 16..... Estimated 2,000,000 ft. gas 1,527-60 ft. and 1,910-20 ft.; drilling 2,025 ft.

**DALLAM COUNTY**

James et al's No. 1 fee, Sec. 9, Blk. 47½ ..... Fishing 2,870 ft.
Harry Skelly et al's No. 1 Capitol Synd., Sec. 19, Blk. 17.. Total depth 2,060 ft.; cement.
Marland Oil Co. et al's No. 1 Capitol Syndicate, Sec. 36, Blk. 18, Capitol Syndicate land ..... Shut down 960 ft.

**DEAF SMITH COUNTY**

Julian & DeGrace's No. 1 Mrs. R. A. Hindley, Sec. 47, Blk. K-8 ..... Rig.
Red Hill Oil Corp.'s No. 1 Barrett, Sec. 93, Blk. K-4..... Shut down 700 ft.

**DONLEY COUNTY**

A. T. Drilling Co.'s No. 1 F. E. Harrington, Sec. 39, Blk. 3-C ..... Top lime 2,070 ft.; rainbow show 2,618 ft.; drilling 2,740 ft.

**GRAY COUNTY**

Archer, Blake et al's No. 1 Turneau, Sec. 111, Blk. 2-B.. Spudded and shut down.
Amos et al's No. 1 Crews, NW cor. Sec. 9, Blk. 25..... Spudding.
Bay Shore Oil Co.'s No. 1 C. W. Bradford, Sec. 143, Blk. 2-B ..... Total depth 2,666 ft.; gas shut in and work suspended.
Blackwell & McGee's No. 1 Bowers, Sec. 92, Blk. 2-B .... 3,000,000 ft. gas 2,620-30 ft.; drilling 2,635 ft.
British-Amer. O. Co.'s No. 1 J. E. Meers, Sec. 107, Blk. 3.. 58,000,000 ft. gas and slight spray oil; fishing bit 3,190 ft.
British American Oil Co.'s No. 1 J. M. Patton, Sec. 61, Blk. B-2 ..... Rigging up.
Cole O. & G. Co.'s (was Magdalene Oil Co.'s) No. 1 J. E. Williams, Sec. 17, Blk. 1 ..... Show gas 2,336 ft.; shut down 3,295 ft.; salt water.
Jack Doyle's No. 1 D. W. Osborne, SE cor. Sec. 109, Blk. 3 ..... Rig.
Empire G. & F. Co.'s No. 1 W. C. Archer, SW cor. NE Sec. 174, Blk. 3 ..... Spudding.
Empire G. & F. Co.'s No. 1 B. Hughey, Sec. 129, Blk. 3... Set 6-in. 3,024 ft.; rainbow show oil 3,063 ft., 35,000,000 ft. gas; 1,100 ft. oil and 1,500,000 ft. gas granite wash 3,120-25 ft.; total depth 3,160 ft.; spraying 20 bbls.; running 5-in.
Empire G. & F. Co.'s No. 1 J. F. Meers, NE cor. SE Sec. 107, Blk 3 ..... Fishing tools 720 ft.
Empire G. & F. Co.'s No. 1 J. J. Wall, Sec. 161, Blk. 3.... Total depth 2,930 ft.; shut down; 43,000,000 ft. gas., mixing mud to hold gas.
Empire G. & F. Co.'s No. 1 Webb, SW cor. Sec. 59, Blk. 25 ..... First gas 2,130 ft.; 5,000,000 ft. gas 2,250 ft.; shut down 2,400 ft. for water.
Foster et al's No. 1 G. Cutebank, SW cor. NE Sec. 65, Blk. 25 ..... Building rig.
Gray County Pet. Co.'s No. 1 Herndon, Sec. 147, Blk. 3... Shut down 2,405 ft.
Gulf Production Co.'s No. 1 J. M. Saunders, Sec. 40, Blk. 3 ..... Drilling lime 2,670 ft.
Humble O. & R. Co.'s No. 1 T. B. Haggard, SW cor. Sec. 112, Blk. 3 ..... Drilling 950 ft.
Johnson & Martin's No. 1 Fanny Holloway, Sec. 7, Blk. H, A. W. Wallace Sur. ..... Rig on ground.
John G. Lane's No. 1 A. Chapman, Sec. 19, Blk. 1, A. C. & H. B. Sur. ..... Shut down 3,025 ft.
Magnolia Pet. Co.'s No. 1 fee, Sec. 11, Blk. 3..... 1,800 ft. o'l in sandy lime 2,955-87 ft.; fishing 2,987 ft.
Neudigate et al's No. 1 A. Chapman, NE cor. E ½ SE Sec. 52, Blk. 25 ..... Rigging up.
Pampa Oil Co.'s No. 1 W. R. Campbell, Sec. 90, Blk. 3.... Shut down 120 ft.
Pampa Pet. Co.'s No. 1 Mary Leopold, Sec. 141, Blk. 3.... Drilling 3,020 ft.
Purple Sage Oil Co.'s No. 1 Johnson, Sec. 8, Rockwall County school land ..... Total depth 910 ft.; underreaming 12-in.
Riley & Heck's No. 1 Mrs. Hopkins, Sec. 66, Blk. 2-B..... 5,000,000 ft. gas 2,720-60 ft.; drilling 2,885 ft.
Ruby Oil Co.'s (was Weir, Kribs & Finklea's) No. 1 B. F. Talley, Sec. 114, Blk. 2-M ..... Shut down 635 ft.
Salisbury & Reynolds' No. 1 M. Huselby, C SE NE NE Sec. 55, Blk. 25, H. & G. N. ..... Location.
C. B. Shafer's No. 1 G. Cole, SE cor. W ½ SW Sec. 105, Blk. 3 ..... Rigging up.
The Texas Company's No. 1 H. M. Barrett, Sec. 131, Blk. 3 ..... Rotary: carrying 10-in. 2,370 ft.
The Texas Company's No. 1 J. B. Barrett, NE cor. NW NW Sec. 130, Blk. 3 ..... Spudding.
The Texas Company's No. 1 Osborne, Sec. 108, Blk. 3.... 30,000,000 ft. gas 2,485-2,625 ft.; drilling 2,725 ft.
The Texas Company's No. 3 Saunders, C E ½ Sec. 3, B & B Sur. ..... 11,000,000 ft. gas 2,395-2,415 ft.; increased to 20,000,000 ft. gas at 2,465 ft.; drilling.
Travis et al's No. 1 J. Back, Sec. 44, Blk. 25 ..... 3,000,000 ft. gas 2,256-91 ft.; drilling 2,330 ft.
J. Williams et al's No. 1 C. W. Bradford, Sec. 123, Blk. B-2 ..... Rig blown down.

**HANSFORD COUNTY**

Caldwell et al's No. 1 J. Adriance, Sec. 21, Blk. 2, G. H. & H. Sur. ..... Shut down 585 ft.
Oklavania Oil Co.'s No. 1 Whitson, Sec. 2..... Drilling 2,850 ft.

**HARTLEY COUNTY**

Amerada Pet. Corp.'s No. 1 Frances Farwell, Sec. 27, Blk. 16 ..... Drilling 2,750 ft.
Deep Rock Oil Co.'s No. 1 Lyman & Balfour, Sec. 9, Blk. 2 ..... Shut down, 1,710 ft.
Eslick et al's No. 1 J. B. Irving, Sec. 13, Blk. 13..... Total depth 2,242 ft.; straight-reaming 8-in.
W. W. Holmes' No. 1 G. B. Coots, Sec. 57, Blk. XR..... Show gas 2,450-80 ft.; set 6-in. 2,800 ft.; 600 ft. water 2,840 ft.; drilling 2,940 ft.
J. E. McKanna's No. 1 E. S. Collins, Sec. 3, Blk. LS..... Total depth 3,160 ft.; underreaming 8-in.
J. E. McKanna's No. 1 Frances Farwell, Sec. 30, Blk. 22.. Shut down for underreaming lugs 960 ft.
J. E. McKanna's No. 1 J. M. Shelton estate, Sec. 29, Blk. 202 ..... 160 ft. salt water 3,320-25 ft.; total depth 3,440 ft.; underreaming 6-in.
Kork Oil Co.'s No. 1 J. M. Shelton estate, Sec. 1, Blk. 8-B ..... Spudded and shut down.

**HUTCHINSON COUNTY**

Amarillo Oil Co.'s No. 1 Ida Ingerton, 9,280 feet from NL and 330 feet from EL Sec. 41, Blk. 47..... Drilling 150 ft.
Anderson & Pritchard's No. 1 Yake, Sec. 1, Blk. J..... Top lime 1,930 ft.; set 8-in. 1,935 ft.; 45,000,000 ft. gas 2,640 ft.; top pay 2,746 ft.; spray 20 bbls.; set 6-in. 2,762 ft.; 250 ft. water at 2,786 ft.; sprayed 50 bbls. water from 2,800-10 ft. and 10 bbls. oil from 2,813-15 ft. in lime; drilling 2,885 ft. (corrected).
Dominion Oil Co.'s No. 1 C. H. Jasper..... Drilling 2,750 ft.
Marland Oil Co.s (Leo Flowers) No. 1 Carver, Wm. Heath Sur. ..... Set 8-in. 2,366 ft.; show gas 2,920-25 ft.; 200,000 ft. gas 2,950-55 ft.; drilling 3,050 ft.
Pole Cat Oil Co.s No. 1 W. B. Haile, Sec. 24, Blk. M-21.. Rig.
Panfield Oil Co.'s No. 1 Luginbyhl Brothers, Sec. 50, Blk. M-23 ..... Shut down 1,200 ft.
Phillips Pet. Co.'s No. 1 Yake, Sec. 36, Blk. 46..... Cement. 241 ft.
Pool & Golding's No. 1 Mrs. R. A. Jameson, Antonio Dubois Sur. ..... Drilling 1,000 ft.
Prairie, Shamrock & Hagy's No. 1 Yake, Sec. 35, Blk. 47.. Small shows in lime 2,818-25 ft. and 2,872-75 ft.; 300 ft. oil and 600 ft. water 2,890 ft.; drilling 3,250 ft.
Prairie O. & G. Co. and Vacuum Oil Co.'s No. 1 Cal Merchant ..... Cellar.
Vitek Oil Co.'s (was Get Oil Co.'s) No. 1 W. F. Allen.... Spudded and shut down.

**LIPSCOMB COUNTY**

Everett et al's No. 1 Mrs. H. D. May, Sec. 612, Blk. 43.... Shut down 960 ft.
McCorkle's No. 1 A. Barton ..... Fishing 3,760 ft.
Smith, Kinsley & Ruby's No. 1 C. W. Jones, NE cor. SW Sec. 100, Blk. 43 ..... Drilling 800 ft.

**MOORE COUNTY**

Amarillo Oil Co.'s No. 1 Masterson-J, Sec. 59, Blk. O-13.. 10,000,000 ft. gas 3,025-40 and 3,050 ft.; total depth 3,110 ft.; rebuilt rig; rigging up.
Amarillo Oil Co.'s No. 2 Terry Thompson, Sec. 19, Blk. 44.. Show gas 2,750-2,830 ft., 70,000,000 ft. gas 2,820-90 ft.; drilling 2,975 ft.
Douglas Oil Co.'s No. 1 H. M. Beauchamp, Sec. 112, Blk. 44 ..... Hole full water 1,470 ft.; drilling 1,900 ft.
Marland Oil Co.'s No. 1 J. T. Sneed, Jr., Sec. 25, Blk. 1... Total depth 3,073 ft.; run. 6-in.
Humble O. & R. Co.'s No. 1 Kilgore, Sec. 28, Blk. 44..... Show gas 2,960 ft. 3,010 ft., and 1,000,000 ft. at 3,045 ft.; increased to 6,000,000 ft. at 3,085 ft.; 8,000,000 ft. wet gas at 3,-537 ft.; setting 5-in., total depth 3,551 ft.
Morton & Co.'s No. 1-H Rubert, Sec. 191, Blk. 3-T..... Top of lime 2,474 ft.; shut down 2,540 ft. (corrected).
Phillips Pet. Co.'s No. 2 Special Sneed..... Drilling 880 ft.
Prairie O. & G. Co.'s No. 2 Sneed, Sec. 26, Blk. 6-T..... Total depth 4,300 ft.; will plug back and complete as gasser.
Moore County Oil Co.'s No. 1 Sneed, Sec. 30, Blk. 6-T..... Drilling 2,000 ft.
Shadler Brothers' No. 1 John Lowery, Sec. 237, Blk. 44... Total depth 1,265 ft.; underreaming.
Prairie and Shamrock's No. 1 Gober, Sec. 16, Blk. M-21.. Fishing 1,120 ft.

**OCHILTREE COUNTY**

W. G. Burton's No. 1 Stickler, Sec. 573, Blk. 43..... Shut down 3,740 ft.
Hamilton et al's No. 1 R. E. Wamble, Sec. 144, Blk. 43.... Shut down 250 ft.
McCorkle Pipe Line Co.'s No. 1 R. H. Moore, Sec. 471, Blk. 43 ..... Shut down 1,600 ft.
McCorkle's No. 1 Weinett, Sec. 674, Blk. 43 ..... Rig.
Standard Dev. Co.'s No. 1 Bowden, Sec. 923, Blk. 43..... Shut down 900 ft.

**HEMPHILL COUNTY**

A. J. Calhoun's No. 1 J. C. Isaacs, Sec. 189, Blk. C..... Spudded and shut down.
Hoover et al's No. 1 Schaller estate, Sec. 4..... Spudded and shut down.
Hoover et al's No. 1 fee, J. S. Hood Sur. ..... Small show oil and gas 4,027 ft.; hole full water in sandy lime 4,005-10 ft.; drilling 4,380 ft.

**OLDHAM COUNTY**

Prairie O. & G. Co.'s No. 1 Landergin, SE cor. NE SW Sec. 46, League 310, Capital land ..... Pocket non-inflammable gas 1,620 ft.; exhausted in 24 hours; drilling 1,680 ft.

**POTTER COUNTY**

Greater Amarillo Pet. Co.'s No. 1 Townsite, Sec. 167, Blk. 2, A. B. & M. Sur. ..... Shut down 2,020 ft.
Farmer O. & G. Co.'s No. 1 J. A. Jones, Sec. 3, Blk. 1.... Shut down 200 ft.
Kelmey Oil Co.'s No. 1 W. H. Bush, Sec. 19, Blk. 9.... Rig.

**RANDALL COUNTY**

Patterson et al's No. 1 Campbell & McIlroy, NE cor. Sec. 60, Blk. K-14, T. T. R. R. Sur. ..... Spudded and shut down.

**ROBERTS COUNTY**

Big Bend Oil Co.'s No. 1 Mrs. H. Ledrick & Sons, Sec. 7, Blk. 5-A ..... Rainbow show oil 4,492 ft. and 4,650 ft.; dry sand 4,786-91 ft.; drilling 4,815 ft.
Hill, Cook & Riley's No. 1 L. H. Webb, Sec. 61, Blk. 24.... Gibson Oil Corp.'s No. 1 T. S. Jones, Sec. 109, Blk. C.... Shut down 4,010 ft.; may deepen.
Mercer & Dunbar's No. 1 H. A. Gill, Sec. 127, Blk. M-2... Cellar.
Murphy et al's No. 1 Gill, Sec. 31, Blk. M-2 ..... Shut down 650 ft.
Charles Page et al's No. 1 Hamilton, Tract 2, Clay County school land ..... Shut down 440 ft.
Pan-State Oil Co.'s No. 1 A. H. Tandy, Sec. 179, Blk. 42.. Rigging up.
Pettijohn et al's No. 1 J. A. Meade, Sec. 29, Blk. 1-B..... Skidded rig 20 ft. west and shut down.
Trammel et al's No. 1 A. H. Tandy, School Land Sur.... Spudded and shut down.

**SHERMAN COUNTY**

Gibson Oil Co.'s No. 1 Bivins, Sec. 35, Blk. 3-P..... Fishing 1,140 ft.
Hagy & Harrington's No. 1 S. F. Flores, C SW Sec. 64, Blk. 3-T, T. & N. O. Sur. ..... Location.
Phillips Pet. Co.'s No. 1 Price & Fuqua, C NE Sec. 33, Blk. 2-B, G. H. & H. Sur. ..... Location.
Phillips Pet. and Savoy's No. 1 Roach, Sec. 161, Blk. 1-C.. 500,000 ft. gas 2,840-2,915 ft.; hole full water 3,480-85 ft.; more salt water 3,570 ft.; drilling 3,760 ft.
Whitehead et al's No. 1 Lee Bivins, C SW Sec. 36, Blk. 2, G. H. & H. Sur. ..... Location.

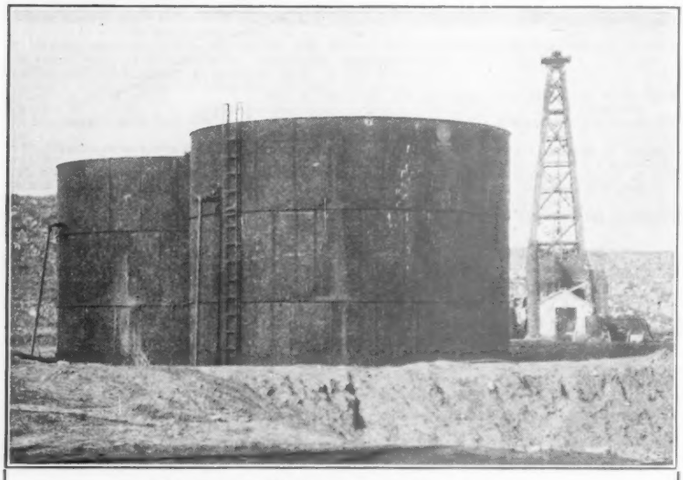
**SWISHER COUNTY**

R. H. Miller's No. 1 Todd ..... Location.

**WHEELER COUNTY**

American Ref. Co.'s No. 1 E. E. Carlton, Sec. 29, Blk. 13 Total depth 2,300 ft.; plugged back to 2,029 ft.; 8,000,000 ft. gas 2,027-29 ft.
Angus et al's No. 1 L. C. Burcham, Sec. 91, Blk. 17 ..... Show gas 1,492 ft.; trying to shut in 25,000,000 ft. gas 1,788 ft.
Angus et al's No. 1 G. A. Morgan, SW cor. SW NE Sec. 93, Blk. 17 ..... Rig on ground.
Boyles & Johnson's No. 1 S. L. Lewis, Sec. 40, Blk. 24.... Fishing for bit 240 ft.
Continental Oil Co.'s No. 2 Company, NW cor. SW Sec. 11, Blk. 27 ..... Run. 6-in. 2,220 ft.
Continental Oil Co.'s No. 2 J. H. Jackson, SE cor. NE Sec. 11, Blk. 27 ..... Drilling 2,025 ft.
Foster et al's No. 1 S. H. McDonald, SE cor. NW SW, J. N. Lindsay Sur. ..... Spudded and shut down.
Magnolia Pet. Co.'s No. 1 Laycock, Sec. 9, Blk. 27..... Drilling 1,600 ft.
Magnolia Pet. Co.'s No. 1 J. A. Worley, NE cor. Sec. 39, Sec. 42, Blk. 24 ..... Drilling 600 ft.
Marland Oil Co.'s No. 1 W. E. Bentley, SW cor. NE Blk. 24 ..... Set 10-in. 1,650 ft.; drilling 1,950 ft.
Marland Oil Co.'s No. 2 W. E. Bentley..... Spudding.
Murchison & Fain's No. 1 Close, Sec. 77, Blk. 23 ..... 10,000,000 ft. gas 1,585-1,610 ft.; shut down.
J. J. Rock Co.'s No. 1 T. C. Jones, Sec. 1, Blk. 24 ..... Fishing casing 1,300 ft.
J. J. Rook's No. 1 C. W. Porter, SW cor. NW Sec. 41, Blk. 24 ..... Drilling 120 ft.
Wheeler O. & G. Co.'s No. 1 P. J. Sorenson, Sec. 53, Blk. A-4 ..... Spudded and shut down.
Smith, Brady et al's No. 1 P. J. Sorenson, Sec. 53, Blk. 4-A ..... Shut down 1,470 ft. for pipe.
E. L. Woodley, Jr., No. 1 Woodley, Sr., Sec. 13, Blk. 5-A.. Water 2,112 ft. and 2,142-44 ft.; shut down 2,175 ft.
The Texas Company's No. 1 Bentley, NE cor. SW Sec. 42, Blk. 24 ..... Drilling 1,520 ft.
Tidal Oil Co.'s No. 1 Bentley, NE cor. E ½ SW Sec. 42, Blk. 24 ..... Drilling 300 ft.
Upham Gas Co.'s No. 1 R. W. Griswold ..... Drilling 1,300 ft.
Upham Gas Co.'s No. 1 C. George, C W ½ NW NE Sec. 88, Blk. 17 ..... Spudded.
Watchorn O. & G. Co.'s No. 1 F. E. Shelton, C NE NE Sec. 22, Blk. 24 ..... Rigged up and shut down.

KEYSTONE COPPER STEEL



*3,000-Barrel Maloneys at Borger, Texas*

# MADE OF THE MOST DURABLE STEEL

MALONEYS save money in two ways: (1) Your tank investment is protected by their unequalled *durability*, resulting from our use of rust-resisting Keystone Copper Steel. (2) Evaporation losses are prevented by their exceptional *tightness*, insured by their patented crimp at seams and joints, and by the use of our special gasketing and Gaso cement. Color is light pearl gray.

All seams reinforced with steel strips and channels —large cleaning out plates set flush with bottoms —the best of valve and deck equipment—are other MALONEY features.

*"Alone in Quality"*

MALONEY TANK MFG. COMPANY
Tulsa, Okla., U. S. A.
*Distributors at All Principal Petroleum Points.*

Sizes: 12 to 3,000 Barrels.

Packed in Steel-Bound Crates for Export

*Howell Aluminum "3-in-1" Vacuum Pressure Valve and Thief-Hatch—The BEST and LATEST Deck Equipment—POSITIVE Safety.*

MADE OF KEYSTONE COPPER STEEL

MALONEY PATENTED BOLTED COPPER-STEEL TANKS

MADE OF KEYSTONE COPPER STEEL

MALONEY
"ALONE"

## ENGLAND ENCOURAGES USE OF GASOLINE

(Continued from Page 40)

responding cost in July, 1914. A correspondingly relatively low price for gasoline may be seen during the entire period since before the war."

Mr. Fox shows the trend of the cost-of-living index, compared with gasoline prices on the basis of prewar figures during the period from January 1, 1919, to the end of 1926. His gasoline figures are based on prices in the London Metropolitan Police Zone. He states that the actual prices throughout the rest of the country are higher, but the relative position is approximately the same as in the London area. The gasoline prices are those compiled in the office of the commercial attache, whereas the prices of "all items" are obtained from the Ministry of Labor Gazette, cost-of-living figures.

**Cost-of-Living Contrast**

This interesting table shows that on January 1, 1919, the cost of all items of living, compared with the price of July, 1914, was 120 per cent plus, while the gasoline prices were 100 per cent plus; for 1920 all items were 125 per cent plus and gasoline prices were 52 per cent plus; for 1921 all items were 165 plus, and gasoline prices were 76 plus; for 1922 all items were 92 per cent plus, while the gasoline prices were 24 per cent plus; in 1923 all items were 78 per cent plus, with gasoline at zero. In 1924 all items were 77 per cent plus, while gasoline was 24 per cent minus; in 1925 all items were 80 per cent plus and gasoline 5 per cent minus; in 1926 all items, 75 per cent plus; gasoline, 24 per cent minus; and for December 1, 1926, all items were 79 per cent plus, gasoline 21 per cent minus. As January 1, 1927, all items not given, gasoline 24 per cent minus.

The foregoing trend of prices is remarkable in that it shows that while in 1919 the price of all items was 120 per cent plus compared with the price of 1914, it dropped to only 79 per cent plus December 1, 1926, whereas in the case of gasoline the price was 100 per cent plus in 1919 compared with 1914, but dropped to 21 per cent minus on December 1, 1926. In other words, from 1919 to December 1, 1926, the price of all articles declined 41 per cent while the gasoline prices declined 121 per cent, although at the beginning of the period "all items" were 120 per cent plus and gasoline was only 100 per cent plus.

**Costs Per Mile**

"Both per-mile costs and actual prices per gallon, when used for comparative purposes must, however, take into consideration a considerable number of additional factors," states Mr. Fox. "A large percentage of the gasoline consumed in the United Kingdom is of American origin, and in comparing British and American prices either as to actual cost per gallon or on a mileage basis, it must be remembered that the quality of gasoline sold in the United Kingdom being of a rather better quality than the ordinary U. S. Motor grade.

"The No. 1 grade ordinarily used in the United Kingdom for private cars is a still better quality, and while it costs more per unit of volume the mileage and general operating results obtainable from it are much better. This would explain why it might be possible, especially with the smaller and higher-compression engines used, to obtain a lower per-mile cost even with a higher price per gallon.

"In addition to this, such questions as freight charges and other expenses must be taken into consideration in making comparisons. For instance, the ocean freight rates from the United States to Great Britain, at the time of writing, on gasoline shipments works out at about 2d (4 cents) per gallon. In spite of these additional charges and expenses, the present retail price of No. 1 petrol in the London district is only 17½ pence (35 cents) per imperial gallon (and it must be remembered that the imperial gallon is one-fifth larger than the United States gallon). This works out at the equivalent of about 29 cents per United States gallon.

"On the basis of actual cost per gallon, therefore, taking all things into consideration, the price which must be paid by the British consumer would appear to be somewhat less than might perhaps be expected, and on a mileage basis it seems likely that for comparable types of vehicles the gasoline cost is very little, if any more than in the United States and in many cases is probably actually less.

"One of the leading British motor-trade journals, in an estimate of costs of operation of private cars (referred to above), placed the gasoline cost for a car running 22 miles per imperial gallon, with petrol at 20 pence (40 cents) per gallon, at .91 pence or about 1.8 cents (United States) per mile; with the present price of petrol at 17½ pence (35 cents), the per-mile cost of gasoline is only about 1.59 cents, which compares very favorably with the corresponding per-mile cost in the United States.

"In addition to this, it is to be noted that a large percentage of the cars operating in the United Kingdom probably obtain considerably more than 22 miles per imperial gallon, with a corresponding reduction in the per-mile cost, which, however, would be offset to some extent by the fact that petrol prices outside of London run somewhat higher than in London.

"There are a number of other comparisons which might be made to show the relative position of gasoline costs, but perhaps it is sufficient to mention only one, and that with reference to the absolute cost compared with other commodities. Any comparison to this basis must, of course, take into consideration the relative importance of the commodities compared as they might appeal to the individual user.

**In Terms of Commodities**

"It may, however, be of passing interest to note that at present prices in London the cost of each of the following is as much as that of an imperial gallon of petrol: 12 pounds of potatoes, 3 pounds of apples, 2 quarts of milk, 2 bus fares to a nearby suburb, a haircut, an ordinary seat at a small movie theater, 30 cigarets of ordinary grade, or a half bottle of ordinary wine."

Mr. Fox undertakes to state approximately the production and consumption of gasoline in the United Kingdom. He says: "In the absence of official statistics on the subject, no definite figures are available regarding gasoline production or consumption in the United Kingdom. Various estimates are made from time to time, however, and as these estimates usually reach approximately the same figures, they may be taken as reasonably accurate, especially as practically all of the gasoline consumed must be imported, either as such or in the form of crude petroleum for refining. The official customs figures on imports and exports, therefore, are a substantial basis for estimating consumption. The latest such estimate which has been made is that of the special oil correspondent of the Manchester Guardian Commercial, who places the total consumption in Great Britain in 1926 at approximately 630,000,000 imperial gallons, equivalent to about 756,000,000 United States gallons. This authority places the total new supply of gasoline for the United Kingdom in 1926 at 663,354,696 imperial gallons, of which he estimates that about 33,000,000 gallons went into storage. Thus the total supply increased by 33 per cent over that for 1925, while actual consumption increased about 26 per cent."

The motor spirit supply in Great Britain shows a total consumption for 1926 of 630,354,696 imperial gallons, compared with 500,305,777 imperial gallons in 1925. The statistical table showing motor-spirit supply in Great Britain and an estimate of domestic production shows the amount of gasoline obtained from crude oil estimate at 25 per cent of the crude in 1926 as against 30 per cent of the crude in 1925. The smaller percentage of 1926 is not to be taken as implying any less efficiency in local refining practices, says Mr. Fox, but simply as

indicating a smaller proportion of high-grade crude imported in 1926.

This table showing motor-spirit supply in Great Britain follows:

MOTOR SPIRIT SUPPLY IN GREAT BRITAIN

| | —Imperial Gallons— 1925 Revised | 1926 |
|---|---|---|
| Petrol imports | 404,834,226 | 562,176,619 |
| Less exports | 46,296,273 | 18,428,947 |
| | 358,537,953 | 543,747,672 |
| Add petrol obtained from crude oil refined in this country | *168,486,444 | †134,559,901 |
| | 527,024,397 | 678,307,573 |
| Less exports of petrol refined in Great Britain | 51,286,620 | 39,952,875 |
| | 475,737,777 | 638,354,698 |
| Add benzol and petrol refined from Scottish shale oil | 24,568,000 | 25,000,000 |
| | 500,305,777 | 663,354,696 |
| Less increase in stocks, 1926 | | 33,000,000 |
| | | 630,354,696 |

*30 per cent of crude. †25 per cent of crude.

## DEATH OF C. K. CLARK, LOUISIANA PRESIDENT

(Continued from Page 46)

foreman and gauge supervisor. He was district foreman of the Eureka Pipe Line Co. for seven years and in 1902 was made superintendent of the George A. Burt Co., in charge of pipe lines. In 1909 he went to the Standard Oil Co. of Louisiana as superintendent of the pipe line department and was made manager of the pipe line and production departments in 1912. In May, 1919, he was selected to head the Oklahoma Pipe Line Co. and was made vice president of the Standard Oil Co. of Louisiana in December of that year. February 15, 1926, he was elevated to the presidency.

Probably no other man in America today had a more intimate and extensive knowledge of the petroleum industry. For 40 years his genius had been devoted to its development, and his personality had been felt in many fields. In the oil country everywhere there are men who sing the praises of "Cal" Clark. The most unkind thing Mr. Clark ever did, it has been said, was to brush aside a newsboy in the streets of Beaumont on a busy day—and, he ended in buying every paper the lad possessed.

A delightful and abiding sense of humor sparkles in every man's recollections of "Cal" Clark. A typical incident occurred in the old Colonial hotel at Shreveport, La., years ago, when he and Joe McCue deliberately shot each other to an imaginary and picturesque death with blank cartridges while their audience leaped from windows and clawed under any shelter at hand to evade the supposed flying bullets.

It seems there was the usual friendly controversy, over Mr. Clark as an infant prospect for a name. Father wanted to call him Charles; mother insisted on Kelly. Father did call him Charlie, and mother called him Kelly, so quite inevitably he became Charles Kelly Clark. To his mother always, and to his friends in the early days, he was simply "Kell." But, in the course of years "Kell" became "Cal."

When Humble was a new oil town, the Governor of Texas sent the state rangers to close all gambling houses, saloons, and other "joints." A desperado named Clarke publicly stated his disdain for the Rangers, and friends of C. K. Clark, who was in Houston at the time, saw an opportunity for a huge practical joke.

They advised the rangers that "Clarke" was coming to Humble on a certain train, and, when C. K. Clark got off, the rangers grabbed him at the direction of these friends. Mr. Clark readily understood it was a case of mistaken identity, and appealed to his friends, all of whom had constituted themselves a "reception committee" to see the fun. But these friends had "faded," and Mr. Clark was forced to return to Houston. Until Mr. Clark's death, his friends always looked for "fireworks" whenever the incident was mentioned.

### VISITING MID-CONTINENT

M. R. Walton, sales manager of the refinery division of the Widdell Engineering Co., and Arthur C. McKee & Co. Associates, Cleveland, Ohio, is visiting the southwestern fields.

## GEOLOGISTS EXPECT RECORD CONVENTION

(Continued from Page 39)

relation purposes—(20 minutes) (lantern slides) J. A. Cushman.

13. The use of evolutionary chantes in geologic correlation—(15 minutes) N. L. Thomas.

14. Microfossils in the West Texas geologic section—(10 minutes) Hedwig T. Kniker.

15. Microscopic identification of formations at Amarillo—Joseph Maucini.

Numerous papers on different fields will be read by title and prepared later for publication.

**Ladies Entertainment**

(Have husbands register for ladies.)

**Thursday Afternoon**

3:00 to 5:30—A tea at Oakhurst Country Club. Transportation by private automobiles and buses will be provided, leaving the Mayo Hotel at 2:30, 3:30 and 4:30 p. m. and returning at 4:00, 5:00 and 5:30 p. m.

**Friday Morning**

An auto ride is planned for Friday morning, leaving the Mayo Hotel at 9:30 a. m.

**Friday Afternoon**

A matinee is provided for ladies at the Ritz Theater at 2 p. m.

A Nursery with competent nurses will be in Room 516 Mayo Hotel.

**Ponca City Field Trip**

Make reservations at registration desk, Thursday.

Special train leaves Tulsa at 11 p. m., Saturday night, fare $12.28, including Pullman.

Marland Oil Co. gives breakfast at Ponca City and furnishes transportation Sunday.

Tonkawa, Braman and Hubbard Oil Fields will be visited in the morning.

At noon the 101 Ranch will provide a Buffalo barbecue.

In the afternoon the 101 Ranch Wild-west Shows will give a special performance.

Special train leaves Ponca City at 7 o'clock Sunday night arriving in Tulsa at 11 P. M. Return fare $9.76 including Pullman.

Those going from Ponca City to Ardmore will find special Pullmans waiting. Leaving Ponca City at 8:57 p. m., Sunday night. Fare to Ardmore $7.48 and Pullman $3.75.

**Ardmore Field Trip**

Begins at Ardmore Monday morning, March 28th.

Transportation furnished by Ardmore Chamber of Commerce.

The party will study the geology of the Arbuckle Mountains on Monday.

Seven Oklahoma oil fields will be visited on one trip Tuesday and the geology of the Ardmore Basin will be visited on another trip Tuesday.

The trip will be in charge of Dr. C. N. Gould of the Oklahoma Geological Survey.

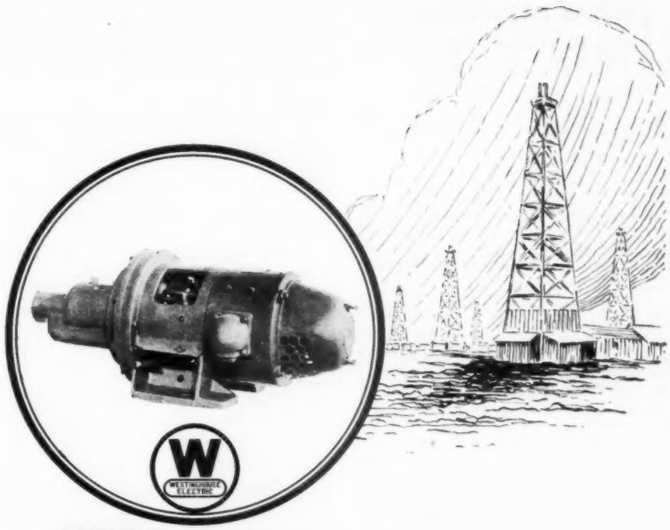
Reservations should be made at once.

**Seminole Field Trip**

For those desiring to visit the Seminole Oil Fields a special trip can be arranged leaving Tulsa 10 p. m., Saturday for Holdenville, spending the night there and leaving at 7:28 a. m. for Seminole arriving there at 8:20 a. m. Railroad fare Tulsa to Seminole, $4.23. The train for Oklahoma City leaves Shawnee at 4:05 p. m. Fare, Shawnee to Ardmore, $5.03. Special arrangements can be made for those who wish to visit Ponca City on Sunday to see the Seminole Fields on Monday. This trip is not recommended for ladies.

### J. H. MORRISON DIES

OIL CITY, Pa., Mar. 19.—John H. Morrison died at his home here Sunday. He was born April 17, 1856, and followed the oil business, having been driller, contractor and producer. The last 16 years he has been president of the Franklin Foundry Co. of Franklin.

Wherever there's Oil

WHERE there's the thump of drills—where derricks crane skyward and the smell of oil is in the air—there you'll find Westinghouse ready to serve. Be it the frozen north, or under southern skies, the sturdy dependable rig lighter is on the job with the first drillers and stays there to the end.

Little wonder oil men everywhere know and depend on the Westinghouse Rig Lighting Turbine. All it needs is a small steam pipe and a plank floor—and then, an abundance of light for every rigging need! There are only five moving parts—nothing to get out of order. Self-governing—and protected against overspeeding even should the governor fail. Compact—less than three feet long and fifteen inches wide. Ready to run, wherever you put it—no adjusting or alignment.

The Westinghouse Rig Lighting Turbine is one of the Westinghouse family, built by the builders of the greatest central station generators. It bears the Westinghouse mark of dependability and is sold everywhere through Westinghouse Sales Offices.

Westinghouse Electric & Manufacturing Company
East Pittsburgh Pennsylvania

Sales Offices in All Principal Cities of the United States and Foreign Countries

Westinghouse

X8783-4

## TEXAS PANHANDLE

(Continued from Page 48)

| | | | |
|---|---|---|---|
| Double Five Oil Co. .... | 1 | 40 | 30 |
| Douglas Oil Co. and Cline ..... | 2 | 24 | 25 |
| E. J. Dunnigan et al .... | 2 | 276 | 230 |
| Echo Oil Co. ..... | 4 | 1,742 | 1,720 |
| Empire Gas & Fuel Co.. | 25 | 3,292 | 4,250 |
| Fly Blackburn Oil Co.... | 2 | 75 | 60 |
| Four Y Oil Co. ..... | 1 | 0 | 0 |
| Franterhouse & Wetzel. | 1 | 52 | 40 |
| Gates Oil Corp. (F. E. Kistler) ..... | 4 | 230 | 205 |
| Goldelline Oil Co. ..... | 6 | 475 | 450 |
| Golding & Phillips .... | 1 | 15 | 10 |
| Gopher Oil Co. ..... | 1 | 10 | 10 |
| Grimes & Watts ..... | 1 | 100 | 85 |
| Gulf Prod. Co. and Panhandle Ref. Co. ..... | 54 | 6,798 | 5,525 |
| Gulf Prod. Co. .... | 36 | 3,939 | 3,535 |
| L. R. Hagy ..... | 1 | 0 | 0 |
| Heywood et al (Prairie et al) ..... | 1 | 10 | 10 |
| J. K. Hughes Dev. Co... | 22 | 2,295 | 1,900 |
| Holmes, Currie & McKnight ..... | 3 | 250 | 200 |
| W. H. Holmes ..... | 2 | 170 | 250 |
| Homestead Oil Co. ..... | 1 | 25 | 15 |
| Hutchinson Co. Oil Co.. | 1 | 0 | 0 |
| Dan A. Japhet ..... | 5 | 610 | 550 |
| Julian Pet. Corp. (Canyon) ..... | 5 | 820 | 825 |
| Kistler Oil Co. ..... | 2 | 800 | 950 |
| Kistler & Lenix .... | 2 | 670 | 630 |
| Lenix Oil Co. et al .... | 1 | *82 | 100 |
| J. H. Lenix ..... | 1 | 20 | 20 |
| Lenix & Patterson ..... | 2 | 1,211 | 1,080 |
| Lucky 10 Oil Co. ..... | 4 | 125 | 130 |
| Manhattan Oil Co. .... | 1 | 93 | 85 |
| Marland Oil Co. ..... | 59 | 4,638 | 4,550 |
| Midwest Exploration Co. | 19 | 3,640 | 3,940 |
| Minnehoma Oil Co. & Kistler ..... | 2 | 410 | 375 |
| McMan Oil & Gas Co... | 18 | 2,203 | 2,250 |
| McIlroy & Herring .... | 6 | 740 | 720 |
| S. D. McIlroy ..... | 4 | 360 | 350 |
| S. D. and W. W. McIlroy | 8 | 800 | 835 |
| McIlroy Bros. et al .. | 4 | 920 | 805 |
| McSpadden & Heywood. | 1 | 18 | 20 |
| J. H. Middleton ..... | 4 | 42 | 45 |
| Mudge Oil Co. ..... | 1 | 9 | 10 |
| Murchison & Fain ..... | 2 | 205 | 275 |
| Newby Oil Co. ..... | 2 | 75 | 85 |
| New Domain Oil Co. ... | 3 | 100 | 105 |
| Pantex Oil Co. (Westex) | 9 | 1,293 | 1,200 |
| Phillips & Heywood ... | 2 | 630 | 630 |
| Panhandle Oil Co. ..... | 1 | 97 | 100 |
| Paramount Oil Co. ..... | 1 | 313 | 300 |
| J. R. Phillips (Blaisdel) | 1 | 8 | 10 |
| J. R. Phillips et al .... | 4 | 1,030 | 1,590 |
| Phillips Pet. Co. ..... | 182 | 25,475 | 25,540 |
| Prairie Oil & Gas and Phillips Pet. Co. .... | 45 | 14,523 | 12,291 |
| Prairie Oil & Gas Co. et al . ..... | 3 | 909 | 900 |
| Prairie Oil & Gas Co. .. | 7 | 310 | 329 |
| Plains Drilling Co. .... | 1 | 15 | 10 |
| Pure Oil Co. ..... | 3 | 618 | 545 |
| Relief Oil Co. ..... | 4 | 600 | 510 |
| Henry Riley ..... | 1 | 145 | 125 |
| Riley & Holmes ..... | 2 | 250 | 225 |
| Rock Island Oil Co. .... | 1 | 10 | 15 |
| Roxana Pet. Corp. ..... | 10 | 471 | 740 |
| Ryan Pet. Co. ..... | 4 | 306 | 340 |
| Skelly Oil Co. ..... | 25 | 2,626 | 2,520 |
| Skiatex Oil Co. ..... | 6 | 1,007 | 1,080 |
| J. L. Smith ..... | 2 | 85 | 80 |
| Smith & Bynum ..... | 2 | 115 | 100 |
| Southwestern Oil & Dev. Co. ..... | 4 | 1,541 | 1,225 |
| Spring Creek Oil Co. ... | 4 | 550 | 750 |
| Summit Oil Co. ..... | 3 | 600 | 525 |
| Sunny Jim Oil Co. ..... | 5 | 308 | 272 |
| Sunburst Oil Co. ..... | 2 | 326 | 300 |
| Sunrise Oil Co. ..... | 1 | 0 | 0 |
| J. A. Swindler & Son... | 1 | 0 | 0 |
| Tex-O Oil Co. ..... | 1 | 25 | 20 |
| Travelers Oil Co. ..... | 3 | 525 | 480 |
| Triangle Oil Co. ..... | 5 | 1,010 | 1,015 |
| J. D. Ward et al ..... | 3 | 175 | 190 |
| White Eagle Oil & Ref. Co. ..... | 26 | 1,530 | 1,600 |
| J. O. Whittington ..... | 1 | 0 | 0 |
| Total Hutchinson Co.. | 809 | 112,411 | 107,625 |
| Average per well .... | | 140.5 | 133.28 |
| **Carson County** | | | |
| Amarillo Oil Co. ..... | 1 | 0 | 0 |
| American Ref. Co. .... | 9 | 820 | 720 |
| Champlin Ref. Co. .... | 1 | 85 | 75 |
| Empire Gas & Fuel Co.. | 2 | 109 | 100 |
| Gates Oil Corp. ..... | 1 | 10 | 5 |
| Gulf Prod. Co. ..... | 16 | 232 | 245 |
| Magnolia Pet. Co. ..... | 1 | 350 | 340 |
| Marland Oil Co. ..... | 19 | 1,414 | 1,300 |
| McMan Oil & Gas Co.... | 4 | 1,092 | 1,205 |
| Nunn & McAuley ..... | 1 | 965 | 895 |
| Parks et al ..... | 1 | 290 | 275 |
| Prairie Oil & Gas Co.... | 1 | 670 | 680 |
| Republic Prod. Co. .... | 1 | 30 | 25 |
| Roxana Pet. Corp. ..... | 6 | 915 | 725 |
| W. W. Silk et al ..... | 3 | 85 | 90 |
| Skelly Oil Co. ..... | 3 | 87 | 205 |
| Southwest Oil & Dev. Co. | 1 | 17 | 20 |
| Sunny Jim Oil Co. .... | 2 | 10 | 10 |
| The Texas Company ... | 13 | 408 | 500 |
| Total Carson County.. | 87 | 7,589 | 7,415 |
| Average per well .... | | 89.2 | 85.2 |
| **Gray County** | | | |
| Canyon Oil Co. ..... | 1 | 15 | 15 |
| Empire Gas & Fuel Co.. | 3 | 75 | 55 |
| Gulf Prod. Co. ..... | 12 | 965 | 830 |
| Humble Oil & Ref. Co... | 10 | 477 | 440 |
| Magnolia Pet. Co. ..... | 18 | 417 | 410 |
| McMan Oil & Gas Co. .. | 10 | 643 | 695 |
| Marland Oil Co. ..... | 1 | 25 | 35 |
| Nabob Oil Co. ..... | 1 | 100 | 30 |
| Phillips Pet. Co. ..... | 4 | 357 | 350 |
| Prairie O. & G. and Atlantic & Shamrock ... | 15 | 1,778 | 1,700 |
| Pure Oil Co. ..... | 5 | 340 | 430 |
| Roxana Pet. Corp. ..... | 1 | 41 | 40 |
| Sun Oil Co. ..... | 3 | 130 | 100 |
| The Texas Company ... | 5 | 137 | 240 |
| Wilcox-Pampa Oil Co.... | 16 | 2,570 | 2,205 |
| Young et al ..... | 1 | 0 | 0 |
| Total Gray County.... | 106 | 8,070 | 7,575 |
| Average per well .... | | 76.1 | 71.4 |
| **Moore County** | | | |
| Cadman et al ..... | 1 | 20 | 15 |
| **Potter County** | | | |
| Amarillo Oil Co. ..... | 1 | 30 | 30 |
| **Wheeler County** | | | |
| Continental Oil Co. .... | 2 | 256 | 220 |
| Gibson Oil Corp. ..... | 5 | 560 | 545 |
| Laycock et al ..... | 1 | 7 | 5 |
| Magnolia Pet. Co. ..... | 1 | 591 | 555 |
| Mid-Continent Pet. Corp. | 1 | 35 | 20 |
| Murchison & Fain ..... | 1 | 0 | 10 |
| Mid-Kansas Oil & Gas Co. ..... | 2 | 340 | 350 |
| Midwest Exploration Co. | 2 | 8 | 10 |
| World Oil Co. ..... .. | 2 | 55 | 45 |
| The Texas Company ... | 1 | 65 | 60 |
| Total Wheeler County | 18 | 1,917 | 1,820 |
| Average per well .... | | 106.5 | 101.1 |
| Gr. total Panhandle.. | 1,021 | 130,037 | 124,480 |
| Average per well .... | | 130 | 121.9 |
| Gr. total 4 wks. ago.. | | | 130,372 |
| Av. per well 4 wks. ago | | | 136.2 |

## FUEL AND KEROSENE PRICES ARE LOWER

(Continued from Page 36)

the larger refiners to store their excess gasoline during the next month or six weeks. These storage programs, if they continue, will tend to limit the amount of distress gasoline which is being offered currently and aid in restoring the confidence which is necessary before the gasoline market which has been demoralized for weeks, can be stabilized.

**Other Products**

Although there is a general feeling that some improvement in the refinery gasoline situation is near at hand, that feeling does not apply to other products. All fuels and burning oils are weak and no improvement is expected. There has been enough improvement in the kerosene demand to have resulted in at least firm prices under ordinary conditions but there has been disposition on the part of the refiners to take advantage of this condition.

The distillate demand has dropped so that the movement from the Mid-Continent is confined to contract shipments with no activity in the open market. A few manufacturers are endeavoring to get rid of this material by changing their operations to make kerosene.

All grades of fuel oils slumped an additional 2½ to 5 cents during the week. So far as Oklahoma is concerned, the weakness has been brought about by lower prices in other areas.

**Gasolines and Naphthas**

The low prices prevailing last week in the common domestic grades of refinery gasolines have been explained. The first of the week the 58-60 U. S. Motor moved back to a low of 6¼ cents with a scale of prices ranging up to 7 cents. Quite a number of refiners are refusing to quote below 6¾ cents. Their regular buyers are willing to pay that price. The policy of these refiners which they have held to consistently for several weeks, has prevented a complete demoralization of the gasoline market in the Mid-Continent area.

The high gravity gasolines continued to slump even more than the 58-60 and lower gravity products. As has been explained in these columns previously, this is a development of the abnormally low prices prevailing for all gasolines including natural gasolines. With all grades of natural gasoline available at from 3½ to 5 cents, gravity has lost all of its former significance in refinery costs and the availability of these low boiling point materials to refiners has made it possible to lower the entire distillation range of the finished refinery gasoline with very little if any additional costs.

Due to this situation the price difference between the 450, 437, 400, 375 and 350 endpoint gasolines the past week has not exceeded one-half cent for each grade.

A 450 endpoint naphtha of 48 to 52 gravity will generally bring the seller as much or more than a U. S. Motor grade price. The explanation for this lies, of course, in the situation just mentioned. The lower the gravity of the naphtha, the more low priced natural gasoline can be blended with it to obtain a finished motor fuel. The amount of naphtha available in Oklahoma due to this condition is extremely limited.

**Kerosenes and Distillates**

The 41-43 water white grade of gasoline slumped to below 5 cents for the first time in over a year. The product was available at 4¾ cents with a price range up to 5 cents. The higher gravity grades experienced a similar reduction.

Buyers of distillates obtained another quarter cent reduction in price. Sellers also state that the buyers are more particular as to specifications demanding the best. A late cold spell in the Middle West is the only development expected which will aid the distillate market until buying starts in the summer for fall consumption. The price range for the different grades is between 3½ and 4 cents.

**Fuel and Gas Oils**

Although very little material is available in Oklahoma for March shipment, sellers were forced to lower their prices to compete with other refinery groups. There has been considerable speculation regarding the April market. Several short sales were reported for April delivery at a price which indicates that some buyers expect a steady slump in fuel oil prices so that the price on the lower gravity grades in Oklahoma will be below $1 in the next 30 days.

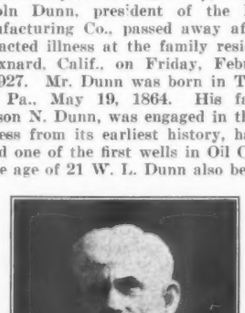
Gas oil is more freely offered than fuel oils and the price has slumped to the point where quotations are near a parity with the high gravity fuels. Purchases are held down to the expectation of still lower prices.

**Natural Gasolines**

The situation in natural gasolines is practically the same as that which confronts the refinery market. The price decline in the different grades was not as much the past week as in previous seven-day periods. Some of the large manufacturers are storing their output in excess of regular shipments. It is also reported that considerable quantities of the lighter grades are being rerun to secure a lower gravity and higher endpoint product. The manufacturers take a heavy volume loss in this operation but with Grade C available as low as 3½ cents this plan is believed preferable to the practice of trying to force more material on the market already in distress.

## W. L. DUNN PASSES

Ending a career of almost a half a century in the petroleum industry, William Lincoln Dunn, president of the Dunn Manufacturing Co., passed away after a protracted illness at the family residence in Oxnard, Calif., on Friday, February 25, 1927. Mr. Dunn was born in Tarentum, Pa., May 19, 1864. His father, Johnson N. Dunn, was engaged in the oil business from its earliest history, having drilled one of the first wells in Oil Creek. At the age of 21 W. L. Dunn also became



W. L. Dunn

actively engaged in oil field work, operating as an oil well drilling contractor for a long period of time throughout Ohio, Illinois and Indiana. In 1896 he went to Los Angeles, Calif., where he followed this occupation. Later he went to Santa Maria as superintendent of the Western Union Oil Co. but gave up this position after a short time to engage in the drilling of oil wells in Santa Ynez district with Henry J. Crocker of San Francisco. Two years later he severed his connection with Mr. Crocker to devote his efforts to the manufacture of casing tongs which he had invented for oil well drilling. In 1911 Mr. Dunn went to Oxnard, Calif., and was instrumental in forming the Dunn Manufacturing Co., of which he had since been president. His death will not result in any change in the management of the company.

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# Detonation in Petroleum Motor Fuels

## Not All Cracked Gasoline Satisfactory Antiknock Motor Fuels. Knocking Increases With Rise in Boiling Points

By Samuel P. Marley*, Donald R. Stevens* and W. A. Gruse*

### CONCLUSIONS REGARDING DETONATION

**The authors do not know of any dependable method for determining the detonating tendency of motor fuels except that of direct engine tests.**

**The authors have found a ratio for knock-reducing tendency of a naphthene, an olefin and an aromatic hydrocarbon differing from that indicated by the work of Ricardo. The subject deserves complete investigation.**

**Evidence has been presented for the general belief that the detonating tendency of gasoline fractions increases with rise in boiling point.**

**While it is probable that cracking offers the readiest way for most petroleum refiners to produce motor fuels of improved antiknock value from petroleum, it does not necessarily follow that all cracked gasolines constitute satisfactory antiknock motor fuels, as has been clearly shown in this paper, many do not.**

**The results obtained by the use of different standard fuels indicate the desirability of an agreement as to detonation standards.**

The recent activity of the petroleum industry in producing nondetonating motor fuels has brought much attention to the gasolines made by cracking processes. Cracked gasolines are believed to differ from straight-run gasolines in having a higher content of olefins, and possibly of naphthenes and aromatics. The relatively high nonknocking value of these types of hydrocarbons has been generally recognized. Various methods of measuring detonating tendency have been proposed and discussed, including the variation of compression ratio or of spark advance with fixed compression to the point of incipient detonation, the use of a variety of indicators, and the estimation of the amount of detonation by listening. It has also been proposed to evaluate gasolines for antiknock qualities by chemical analysis. In the absence of published data on the quality of various cracked and other gasolines on the market, it has seemed desirable to the authors to present the results of a study of some of these materials. A single-cylinder engine modified for the purpose and a direct-reading detonation indicator were employed in the investigation. This equipment has proved its value during several years of use.

### Test Engine

The test apparatus employed in this work was a 1,250-watt, magneto ignition, Delco lighting plant with the engine modified for our purpose. The stock cylinder and piston were replaced by a cylinder and piston from an 850-watt engine of the same make, and high compression was obtained by the use of a special water-cooled head, having a combustion chamber similar in shape to the original. Spark timing was rendered adjustable by making the cam shaft housing rotatable. The mixing valve was replaced by a specially designed carburetor having three cups maintaining the same fuel level, all feeding through the same metering orifice. The temperature of the air supplied to the carburetor was regulated by means of an exhaust stove. A load-controlling device and power-recording instrument were used.

### Detonation Indicator

The indicator used is a modification of the bouncing pin type. Instead of leaving the pin free, as in the Midgley gas-generating indicator, the pin is tapped into the indicator piston and held rigidly at the top by lock nuts, the tension on the main spring being adjustable. The shock of the detonation is transmitted to an anvil secured to the short arm of an indicating lever, the long arm of which travels over a scale. Movement of this lever is damped by a very light spring. The indicator is so adjusted that when the engine is not detonating, the lever shows but slight movement. The degree of detonation in the engine is controlled by adjusting the carburetor, the spark timing, and the load on the generator. A more intense detonation is indicated by a higher scale reading. For these tests a compression ratio of 5.5 to 1 was adopted.

In making a test, the standard fuel is made to detonate so that the indicator lever gives a reading at the middle of the scale thus affording readings for both better and worse antiknock values. Changing to a fuel of better antiknock value will then give a lower scale reading. As an example of the method of recording used, the following is given: If the standard fuel gives an indicator reading of 20 on the scale and the test fuel gives a reading of 10, this result is recorded at 20-10. A diagram of the indicator is given in Figure 1.

### Gasoline Used

The gasolines used in this work are described in Table 1.

It is generally agreed that the various methods so far proposed for the chemical analysis of the complex hydrocarbon mixtures present in commercial gasoline are not rigidly exact. Recently Egloff and Morrell (Ind. Eng. Chem., 18, 354, 1926) have combined what are possibly the most convenient of these methods into a procedure for the determination of four classes of constituents, namely, paraffins, naphthenes, aromatics and unsaturated hydrocarbons. Using data obtained by Ricardo (Report, Empire Motor Fuels Committee, Institution of Petroleum Technologists, 1924), they calculated the equivalence of naphthenes and unsaturated hydrocarbons in terms of aromatics, thus arriving at a calculated aromatic equivalent for each fuel analyzed. Use of further data of Ricardo (l.c, page 83) permitted reading off from the calculated aromatic equivalent a "permissible" compression ratio at which the fuel should operate satisfactorily.

The variations in this permissable compression ratio thus served to rate the gasolines as to their detonating tendency. Such a procedure involves two fundamental assumptions, namely: first, that all the hydrocarbons in one class, say paraffins, have the same value; and, second, that results with all engines will correspond to those obtained with the engine used by Ricardo.

The writers have felt that such a procedure would be of great value if its validity could be established. They have therefore submitted the 18 gasolines listed in Table 1, above, to analysis by this method and also to engine tests.

### Analysis of Gasolines

The Egloff and Morrell method of analysis was followed for the determination of the proportions of the four types of hydrocarbons present. The method consists briefly in determining the unsaturated hydrocarbons content by measuring the absorption and polymerization losses to 80 per cent sulphuric acid, the aromatics by nitration and determining the volume of nitro bodies formed, the naphthenes by the aniline point method, and the paraffins by difference. Check determinations were made by each analysis, the averages appearing in the tables.

Tables 2 and 3 give the analyses of the 18 gasolines studied.

As presented in the tables, the entries have been spaced to show certain similarities in composition. The several groups so formed are easily noted. Particularly striking is the group made up of gasolines 1, 2 and 3, in which 3 differs widely in origin from 1 and 2, also the group 10 to 16, gasolines made by cracking Mid-Continent products. The members of this group are similar not only in composition but, as will be seen later, in engine performance also.

In order to test the accuracy of the method of anyalysis, snythetic mixtures of pure hydrocarbons, one of each of the classes considered, were made up and analyzed. The hydrocarbons were normal heptane, hexylene, methylcyclohexane, and c.p. toluene. Mixtures were made to duplicate gasolines, 1, 14, 17 and 18. Only 14 and 17 were analyzed, but all four were used in engine tests. The composition and results of analysis are given in Table 4

### Method of Engine Test

In making a series of tests, the engine is run until uniform temperature has been attained, and speed, load and other conditions are then adjusted so

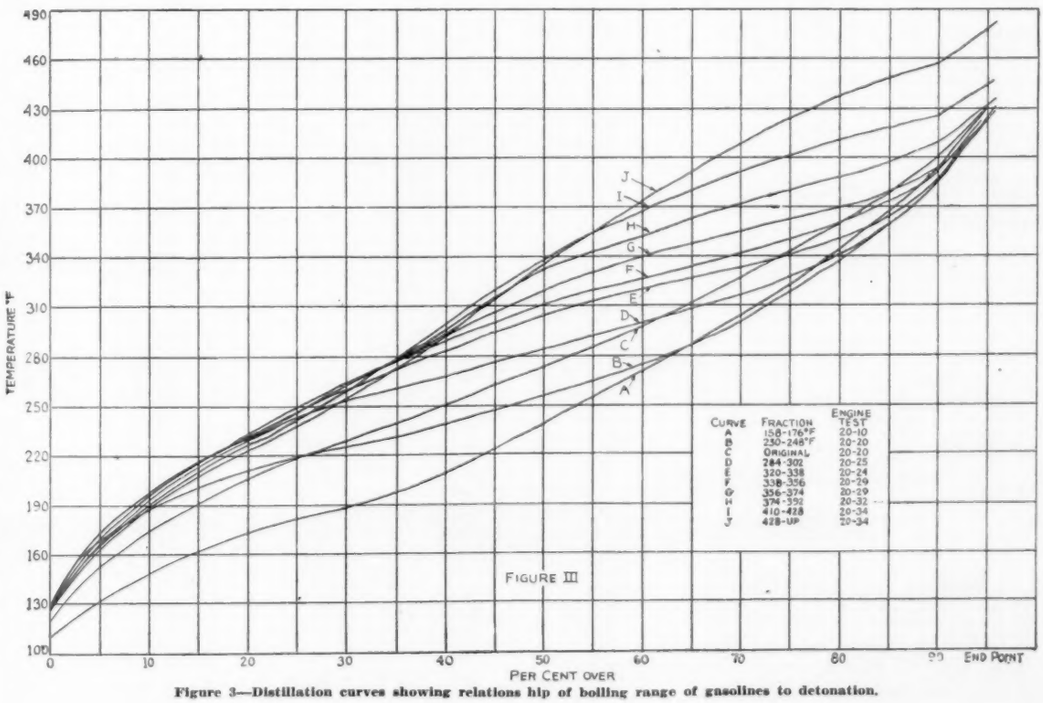


**Figure 3—Distillation curves showing relationship of boiling range of gasolines to detonation.**

*Industrial Fellow, Mellon Institute of Industrial Research, University of Pittsburgh, Pittsburgh, Pa. Paper presented at Annual Meeting of Society of Automotive Engineers.

**Table No. 1—Description of Gasoline**

| Gasoline— | Gravity °A.P.I. | Initial | Dry | 221° | 284° | 392° | Recovery |
|---|---|---|---|---|---|---|---|
| 1. Straight-run Mid-Cont.-A | 58.8 | 118 | 426 | 28.5 | 55 | 91 | 96 |
| 2. Straight-run Mid-Cont-B | 58.8 | 132 | 426 | 24.5 | 51 | 91.5 | 97 |
| 3. Special A | 55.8 | 131 | 425 | 21.5 | 52 | 93 | 97 |
| 4. Motor A | 58.7 | 112 | 428 | 28 | 53.5 | 91 | 96 |
| 5 Special B | 60.9 | 106 | 408 | 32 | 65 | 94 | 95 |
| 6. Special C | 56.7 | 108 | 430 | 30 | 58.5 | 90 | 94 |
| 7. California | 52.7 | 132 | 430 | 22 | 50 | 92 | 97 |
| 8. Straight-run Pennsylvania | 63.1 | 128 | 440 | 22 | 67 | 91 | 95 |
| 9. Motor C | 62.9 | 110 | 475 | 27 | 51 | 86 | 93.5 |
| 10. Untreated from P.S.D*-A | 60.3 | 122 | 416 | 30.5 | 65.5 | 94 | 96.5 |
| 11. Untreated from P.S.D.-B | 58.8 | 128 | 410 | 30.5 | 61 | 95 | 97 |
| 12. Cracked Smackover | 58.1 | 116 | 436 | 31 | 55 | 91 | 96 |
| 13. Motor B | 59.2 | 110 | 436 | 26 | 52 | 88 | 94 |
| 14. Cracked Mid-Continent | 56.6 | 107 | 436 | 26 | 45 | 84.5 | 95.5 |
| 15. Untreated from P.S.D.-C | 55.2 | 117 | 427 | 23 | 41 | 84 | 96 |
| 16. Untreated from P.S.D.-D | 56.6 | 115 | 434 | 24.5 | 48 | 89 | 95.5 |
| 17. Cracked Pennsylvania | 57.1 | 138 | 458 | 17 | 40.5 | 85 | 97 |
| 18. Vapor-phase cracked | 46.9 | 166 | 410 | 17 5 | 58 | 94 | 97 |

*Pressure still distillate.

**Table 2—Analysis of Gasolines**

| Gasoline— | %Unsat. | %Arom. | %Naph's. | %Paraff's |
|---|---|---|---|---|
| 1. Straight-run Mid-Cont.-A | 2.8 | 3.9 | 19.7 | 73.6 |
| 2. Straight-run Mid-Cont.-B | 2.6 | 5.0 | 19.5 | 72.9 |
| 3. Special A | 1.7 | 9.4 | 18.9 | 70.0 |
| 4. Motor A | 5.2 | 10.0 | 16.9 | 67.9 |
| 5. Special B | 7.8 | 11.4 | 18.5 | 62.6 |
| 6. Special C | 3.5 | 10.4 | 28.1 | 58.0 |
| 7. California | 2 2 | 7 3 | 31.7 | 58.8 |
| 8. Straight-run Pennsylvania | 2.5 | trace | 14.9 | 82.6 |
| 9. Motor C | 3.9 | 3.2 | 10.7 | 82.2 |

**Table 3—Analysis of Gasoline**

| Gasoline— | %Unsat. | %Arom. | %Naph's. | %Paraff's |
|---|---|---|---|---|
| 10. Untreated from P.S.D.-A | 17.8 | 20.6 | 12.1 | 49.5 |
| 11. Treated from P.S.D.-B | 17.4 | 20.2 | 12.8 | 49.6 |
| 12. Cracked Smackover | 16.8 | 23.1 | 12.1 | 48.0 |
| 13. Motor B | 13.0 | 18.0 | 12.6 | 56.4 |
| 14. Cracked Mid-Continent | 15.0 | 18.5 | 12.6 | 53.9 |
| 15. Untreated from P.S.D.-C | 19 6 | 22 5 | 11 1 | 46.8 |
| 16. Untreated from P.S.D.-D | 20.2 | 23.0 | 8.6 | 48.2 |
| 17. Cracked Pennsylvania | 11.7 | 16.7 | 6.7 | 64.9 |
| 18. Vapor-phase cracked | 29.5 | 44.7 | 12.4 | 13.4 |

**Table 4—Analysis of Synthetic Gasolines**

| Gasoline— | %Olefins Synth. | Found | %Aromatics Synth. | Found | %Naphthenes Synth. | Found | %Paraffins Synth. | Found |
|---|---|---|---|---|---|---|---|---|
| 17. Cracked Pennsylvania | 11.7 | 8.0 | 16.7 | 15.3 | 6.7 | 9.0 | 65.0 | 67.7 |
| 14. Cracked Mid-Cont. | 15.0 | 18.2 | 18.5 | 13.9 | 12.6 | 13.5 | 53.9 | 54.3 |
| 18. Vapor-phase cracked | 29.5 | .... | 44.7 | .... | 12.4 | .... | 13.4 | .... |
| 1. Straight-run Mid-Cont.-A | 2.8 | .... | 3.9 | .... | 19.7 | .... | 73.6 | .... |

**TABLE 5—Aromatic Equivalents of Gasolines**

| Gasoline— | Aromatic equivalents, calculated from analysis, using 5:4:1 ratio. | Benzol equivalents. Amount of benzene added to SR Mid-Cont. A. Pct. by volume.* | Aromatic equivalents of SR Mid-Cont. A plus the added benzenes using 5:4:1 ratio. |
|---|---|---|---|
| 1. Straight-run Mid-Cont. A | 9.4 | 0 | 9.4 |
| 2. Straight-run Mid-Cont. B | 10.4 | B 7 | 15.7 |
| 3. Special A | 14.5 | B 30 | 35.6 |
| 4. Motor A | 15.3 | B 18 | 25.7 |
| 5. Special B | 17.5 | B 20 | 27.5 |
| 6. Special C | 18.1 | B 40 | 45.7 |
| 7. California | 15.7 | B 35 | 41.1 |
| 8. Straight-run Pennsylvania | 4.2 | K 3+ | |
| 9. Motor C | 6.2 | K 17 | |

+K means kerosene added.

*The general correctness of most of these figures at a somewhat higher compression ratio has been established by H. G. Smith, at Port Arthur, Tex.

**TABLE 6—Aromatic Equivalents of Gasolines**

| Gasoline— | Aromatic equivalents, calculated from analysis, using 5:4:1 ratio. | Benzol equivalents. Amount of benzene added to SD Mid-Cont. A. Pct. by volume. | Aromatic equivalents of SR Mid-Cont. A plus the added benzenes. using 5:4:1 ratio. |
|---|---|---|---|
| 10. Untreated from P.S.D.-A | 27.2 | 35 | 41.1 |
| 11. Treated from P.S.D.-B | 26.9 | 30 | 36.6 |
| 12. Cracked Smackover | 29.5 | 23 | 30.2 |
| 13. Motor B | 23.7 | 20 | 27.5 |
| 14. Cracked Mid-Continent | 24.6 | 28 | 34.7 |
| 15. Untreated from P.S.D.-C | 29.2 | 30 | 36.6 |
| 16. Untreated from P.S.D.-D | 29.2 | 25 | 32.0 |
| 17. Cracked Pennsylvania | 20.7 | K 19 | |
| 18. Vapor-phase cracked | 53.7 | B 48 | 52.9 |

**TABLE 7—Aromatic Equivalents of Gasolines**

| Gasoline— | Aromatic equivalents, calculated from analysis, using 2:2:1 ratio. | Benzol equivalents. Amount of benzene added to SR Mid-Cont. A. Pct. by volume. | Aromatic equivalents of the SR Mid-Cont. A plus the added benzene, using 2:2:1 ratio. |
|---|---|---|---|
| 1. Straight-run Mid-Cont. A | 15.1 | 0 | 15.1 |
| 2. Straight-run Mid-Cont. B | 16.0 | B 7 | 21.1 |
| 3. Special A | 19.7 | B 30 | 40.6 |
| 4. Motor A | 21.0 | B 18 | 30.4 |
| 5. Motor B | 24.4 | B 20 | 32.1 |
| 6. Special C | 26.2 | B 40 | 49.1 |
| 7. California | 24.2 | B 35 | 44.8 |
| 8. Straight-run Pennsylvania | 8.7 | K 3 | |
| 9. Motor C | 10.5 | K 17 | |

**TABLE 8—Aromatic Equivalents of Gasolines**

| Gasoline— | Aromatic equivalents, calculated from analyses, using 2:2:1 ratio. | Benzol equivalents. Amount of benzene added to SR Mid-Cont. A. Pct. by volume. | Aromatic equivalents of the SR Mid-Cont. A plus the added bene, using 2:2:1 ratio. |
|---|---|---|---|
| 10. Untreated from P.S.D.-A | 35.5 | B 35 | 44.8 |
| 11. Treated from P.S.D.-B | 35 3 | B 30 | 40.6 |
| 12. Cracked Smackover | 37.5 | B 23 | 34.7 |
| 13. Motor B | 30.8 | B 20 | 32.1 |
| 14. Cracked Mid-Continent | 32.3 | B 28 | 38.8 |
| 15. Untreated from P.S.D.-C | 37.8 | B 30 | 40.6 |
| 16. Untreated from P.S.D.-D | 37.4 | B 25 | 36.4 |
| 17. Cracked Pennsylvania | 25.9 | K 19 | |
| 18. Vapor-phase cracked | 65.6 | B 48 | 55.9 |

**TABLE 9—Aromatic Equivalents of Gasolines**

| Gasoline— | Aromatic equivalents from analysis, using 5:4:1 ratio. | Aromatic equivalents from analysis, using 2:2:1 ratio. | Benzol equivalents. Amount of benzene added to motor gasoline A. Pct. by volume. | Aromatic equivalents of motor gasoline A plus the added benzene, using 5:4:1 ratio. | Aromatic equivalents of motor gasoline A plus the added benzene, using 2:2:1 ratio. |
|---|---|---|---|---|---|
| 1. Straight-run Mid-Continent A | 9.4 | 15.1 | K 21 | .... | .... |
| 2. Straight-run Mid-Continent B | 10.4 | 16.0 | K 17 | .... | .... |
| 3. Special A | 14.5 | 19.7 | B 20 | 32.2 | 36.8 |
| 4. Motor A | 15.3 | 21.0 | 0 | 15.3 | 21.0 |
| 5. Special B | 17.5 | 24.4 | B 12 | 25.5 | 30.5 |
| 6. Special C | 18.1 | 26.2 | B 30 | 40.7 | 44.7 |
| 7. California | 15.7 | 24.2 | B 23 | 34.8 | 39.2 |
| 8. Straight-run Pennsylvania | 4.2 | 8.7 | K 25 | .... | .... |
| 9. Motor C | 6.2 | 10.5 | K 30 | .... | .... |

**TABLE 10 Aromatic Equivalents of Gasolines**

| Gasoline— | Aromatic equivalents from analysis, using 5:4:1 ratio. | Aromatic equivalents from analysis, using 2:2:1 ratio. | Benzol equivalents. Amount of benzene added to motor gasoline A. Pct. by volume. | Aromatic equivalents of motor gasoline A plus the added benzene, using 5:4:1 ratio. | Aromatic equivalents of motor gasoline A plus the added benzene, using 2:2:1 ratio. |
|---|---|---|---|---|---|
| 10. Untreated from P.S.D.-A | 27.2 | 35.5 | B 25 | 36.5 | 40.7 |
| 11. Treated from P.S.D.-B | 26.9 | 35.3 | B 20 | 32.2 | 36.8 |
| 12. Cracked Smackover | 29.5 | 37.5 | B 15 | 28.0 | 32.6 |
| 13. Motor B | 23.7 | 30.8 | B 11 | 24.6 | 29.7 |
| 14. Cracked Mid-Continent | 24.6 | 32.3 | B 15 | 28.0 | 32.6 |
| 15. Untreated from P.S.D.-C | 29.2 | 37.8 | B 16 | 28.8 | 33.6 |
| 16. Untreated from P.S.D.-D | 29.2 | 37.4 | B 15 | 28.0 | 32.6 |
| 17. Cracked Pennsylvania | 20.7 | 25.9 | K 25 | .... | .... |
| 18. Vapor-phase cracked | 53.7 | 65.6 | B 33 | 43.25 | 47.1 |

that the standard fuel will give the desired reading on the indicator. It may be said that with a standard fuel the same degree of detonation can be obtained from day to day with only minor adjustments of the engine and the indicator. These adjustments are required because of uncontrollable variations in condition of spark plug points, breaker points, valve and piston seal, etc. With a standard degree of detonation obtained on the standard fuel, by turning a three-way cock,

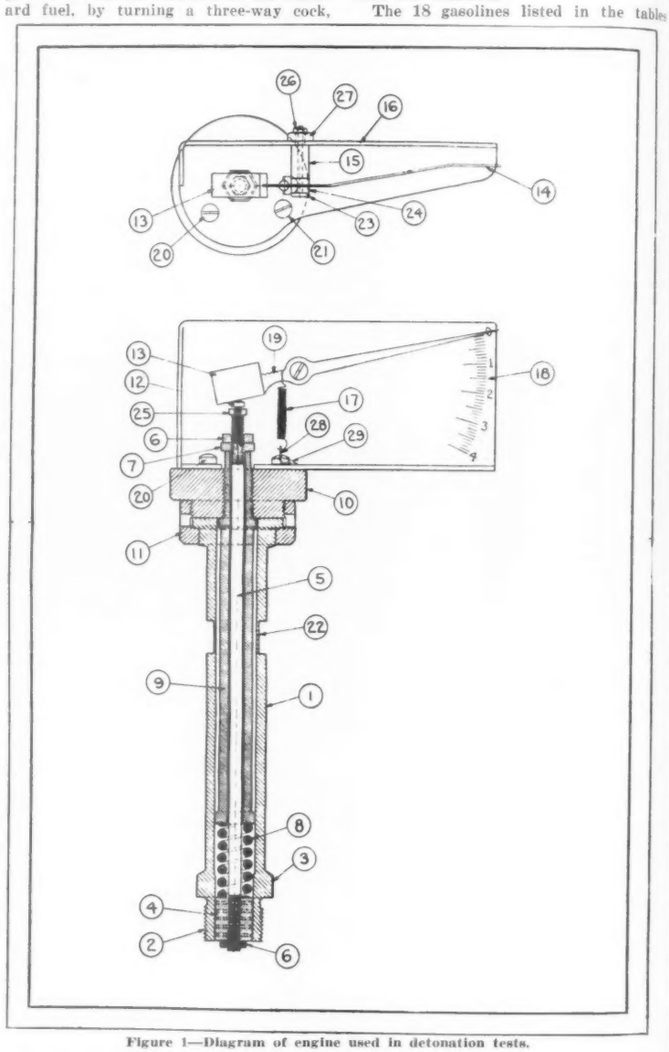


Figure 1—Diagram of engine used in detonation tests.

the supply is changed to the fuel under test; and after the motor has adjusted itself to operation on the new fuel, readings are made on the indicator.

Changes back and forth from the test fuel to the standard fuel are made several times. Usually the readings for each fuel are constant, but any slight variations are minimized by averaging all readings. Enough benzene or kerosene (as the case may be) is then blended with the standard fuel to bring the degree of detonation, as shown on the indicator, down or up to that of the fuel being tested. In securing the results here presented, separate sets of observations were made by two observers at times several weeks apart. Very satisfactory duplication was obtained.

The 18 gasolines listed in the tables were examined in this manner, and the results are given in Tables 5 and 6. In the second column are given the percentages of benzene or kerosene mixed with the standard gasoline to make the mix-

(Continued on next Page)

**TABLE 11**
**Comparison of Synthetic and Petroleum Gasolines**

| Gasoline— | Indicator reading, using motor gasoline A as standard. Synthetic | Petroleum |
|---|---|---|
| 17. Cracked Pennsylvania | 20-50 | 20-35 |
| 14. Cracked Mid-Continent | 20-40 | 20-12 |
| 18. Vapor-phase cracked | 20-4 | 20-3 |
| 1. Str.-run Mid-Cont. A | 20-45 | 20-33 |

**TABLE 12**
**Engine Tests on Influence of Volatility**

75% gasoline 2,
25% fraction distilling between (Deg.F.)

| | Indicator Reading |
|---|---|
| 104-140 | 20-10 |
| 140-158 | 20-8 |
| 158-176 | 20-10 |
| 176-194 | 20-14 |
| 194-212 | 20-17 |
| 212-230 | 20-20 |
| 230-248 | 20-20 |
| 248-266 | 20-21 |
| 266-284 | 20-23 |
| 284-302 | 20-25 |
| 302-320 | 20-22 |
| 320-338 | 20-24 |
| 338-356 | 20-25 |
| 356-374 | 20-29 |
| 374-392 | 20-32 |
| 392-410 | 20-32 |
| 410-428 | 20-34 |
| 428-up | 20-34 |

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ture equivalent in degree of detonation to the gasoline under test. In the third column are given the aromatic equivalents of the gasolines examined, as calculated by the method of Egloff and Morrell from the results of the analyses. This rests on the deduction from the work of Ricardo that 5 per cent of olefins or 4 per cent of naphthenes present in a gasoline are equivalent in reduction of detonation to 1 per cent of aromatics.

From the figures obtained by analysis, a calculation may thus be made of the value of the gasoline in terms of its aromatic content. The following will serve as an example: Gasoline 2, straight-run Mid-Continent B, contained, by analysis, 2.6 per cent unsaturated hydrocarbons, 5.0 per cent aromatics, 19.5 per cent naphthenes, and 72.9 per cent paraffins. Dividing 19.7 by 4, and 2.6 by 5, and adding the 5 per cent of aromatics found to be present, a total aromatic equivalent of 10.4 per cent is obtained. In the fourth column are given the total aromatic equivalents of the mixture made to balance each gasoline on engine test. Each figure includes the benzene actually mixed with the standard, plus the aromatic equivalent calculated from the analysis for the proportion of the standard gasoline present. For example, gasoline 13 required 20 per cent of benzene mixed with the standard fuel (gasoline 1) for balance. Since only 80 per cent of the standard fuel was present in the mixture, the aromatic equivalent of only this 80 per cent should be considered.

$$15.1 \times 0.80 = 12.1,$$

This plus $20 = 32.1$, the aromatic equivalent of the mixture.

### Two Series of Tests

In view of the difference between the apparatus used by Ricardo and that employed in the present work, and because of some uncertainty as to the hydrocarbons studied by Ricardo, it was decided to make experiments on the methyl cyclohexane, hexylene and toluene mentioned above. Two series of tests were made, one by adding each hydrocarbon in turn to gasoline 1, the straight-run Mid-Continent standard, and the other by adding the same proportions of each to gasoline 4, an average motor gasoline. The same results were obtained in both fuels, indicating that 2 per cent of hexylene (an unsaturated hydrocarbon) and 2 per cent of methylcyclohexane (a naphthene) gave the same effect as 1 per cent of toluene (an aromatic).

These results were duplicated in several series of tests with different carbureting equipments, and were further carefully checked by a rather elaborate series of intercomparisons. It should be remembered that hexylene probably gave greater reduction than would have been obtained with heptylene, which has a higher boiling point—about the same as toluene and cyclohexane. It is not believed that the difference would have been great enough to change the nature of the results. In general, these tests are regarded as indicating a 2:2:1 equivalence at a 5.5 to 1 compression ratio in the engine used for this work. This conclusion must be further limited by the possibility that most petroleum naphthenes may be pentamethylene derivatives rather than hexamethylenes, to which class the methylcyclohexane used belongs.

In view of the difference between the two sets of equivalents, the new ratio was used in a recalculation of the aromatic equivalents of the gasolines studied, and the new comparisons are given in Tables 7 and 8.

### Results Compared

When the results from the analyses, using both sets of equivalents, are compared with the results of actual engine tests, it is seen that, while both give rather wide deviations from the engine tests, the 2:2:1 ratio seems to give slightly better agreement than the 5:4:1 ratio.[1] This is particularly true in the group of cracked Mid-Continent products, gasolines 10 to 16. From the results it might be said that a great deal of additional information is needed before a definite conclusion can be reached.

To check the accuracy of the previous

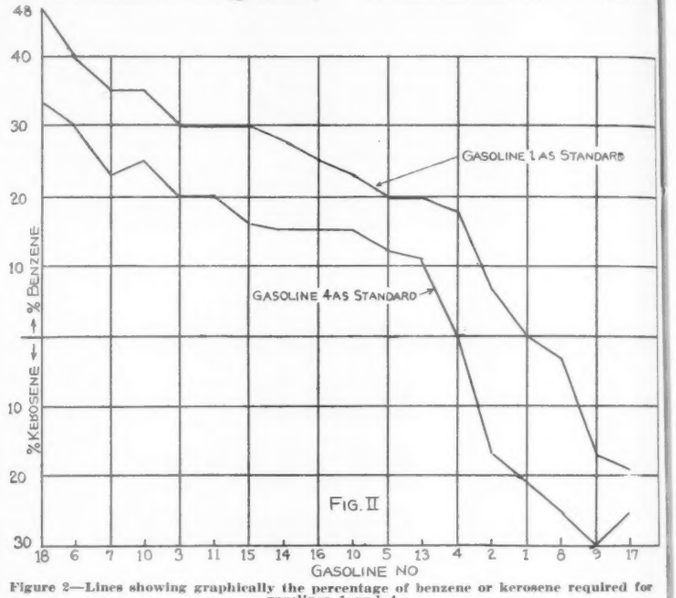


**Figure 2—Lines showing graphically the percentage of benzene or kerosene required for gasolines 1 and 4**

engine tests, the entire set of measurements was repeated, using as a standard gasoline 4, an average motor gasoline, having better non-detonating characteristics than the first standard, gasoline 1. The relation between the two sets of measurements is shown in Figure 2, where the percentage of benzene or kerosene required for each gasoline is presented graphically.

This chart was constructed by arranging the benzol equivalents for the gasolines, measured against gasoline 1 as standard, in the order of decreasing benzol value, and then plotting the benzol equivalents obtained against gasoline 4 as standard, in the same order. While there are a few irregularities, it is believed that the degree of concordance, as indicated by the general parallelism of the graphs, is entirely satisfactory.

For the sake of completeness, tables comparing the analyses with the engine tests, using gasoline 4 as standard, were constructed, as was done for gasoline 1 in Tables 5 to 8. These are given as Tables 9 and 10. The general facts and the comparison of the 5:4:1 and 2:2:1 ratios are not greatly changed by these

[1] It is pointed out by H. G. Smith (private communication) that the value of the ratio might be expected to change with each change in operating compression and temperature, and that, in general, the lower the compression used the nearer would be equivalent values for naphthenes and olefines approach that for aromatics.

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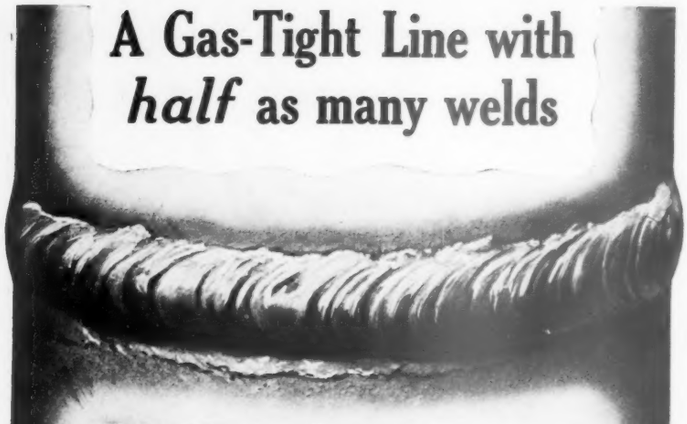

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figures, the conclusions being as indicated by the data in Tables 5 to 8, where the knocking standard, gasoline 1, was used.

It may be well to emphasize the somewhat obvious fact, brought out in Figure 2 and in Tables 9 and 10, that the quality of the standard fuel employed will materially affect the agreement between analyses and engine tests. The use of a standard of less detonating tendency will increase the number of gasolines requiring the addition of kerosene to the standard for balance, while the aromatic equivalent, determined by analysis, will remain the same.

### Synthetic Gasolines

The mixtures of pure hydrocarbons listed in Table 4 were also tested in the motor. The results are given in Table 11. No benzene balance figures were determined, and the table gives only the indicator readings of the mixtures and the natural gasolines, both against the standard fuel.

The results with the pure hydrocarbon mixtures, given in Table 11, indicate that the composition of commercial gasolines is far more complex than might be assumed from the classification given by the method of analysis discussed. It will be noted that the one case of satisfactory agreement between synthetic and natural fuels occurred in the case of a mixture (vapor-phase cracked) containing only 13 per cent of paraffins. In the case of the cracked Mid-Continent gasoline, the synthetic fuel knocked harder than the standard, while the natural fuel knocked less than the standard. Since a normal paraffin hydrocarbon was used in the synthetic mixtures, the explanation may lie in the possibility that the paraffin hydrocarbons in the natural, cracked fuel are of branched-chain structure. The like considerations apply in a less degree to the cracked Pennsylvania and the straight-run Mid-Continent fuels.

### Influence of Volatility

It is generally recognized that, with an increase in boiling point (molecular weight) within a series of hydrocarbons, there is an increasing tendency to detonation. In the absence of published data on the magnitude of this effect for fractions of commercial gasolines, it was decided to study the influence of volatility. Gasoline 2, a straight-run Mid-Continent product, was fractionally distilled through a Glinsky column, 18-degree fractions being collected. Mixtures were made containing 75 per cent of the original gasoline and 25 per cent of successive fractions. These were assayed by the A. S. T. M. distillation method, and were subjected to detonation test against the original gasoline as standard. Distillation curves for the most significant mixtures are given in Figure 3.

As may be seen from the table, the intensity of detonation increases almost regularly with rise in boiling point. The slight irregularities are definite and are attributable to possible accumulation of nondetonating hydrocarbons in certain fractions. The distillation curves show the gasolines to fall into two overlapping groups. In the first, the curves are approximately the same up to about the 40-per cent point, above which they diverge, the detonation characteristics for the individual fuels being also different. In the second group the endpoints are essentially the same (within 10 degrees), but the middle portions of the curves and the detonating tendency again differ. The middle ranges of the curves for all the mixtures seem to be the most significant, and the influence of volatility for this gasoline and its mixtures is as it has generally been supposed to be.

### Discussion of Results

1. Engine tests with gasoline 1 (a comparatively hard-knocking fuel) as standard: It will be seen that in the range of cracked Mid-Continent gasolines (gasolines 10 to 16) the method of Egloff and Morrell gives moderately fair agreement. As soon, however, as materials of widely different types are examined, discrepancies appear. Attention may be called to gasoline 3, which in the engine balanced a mixture of 30 per cent benzene and 70 per cent standard fuel, equivalent to 36 per cent aromatics by the Egloff and Morrell method of calculation, although its aro-


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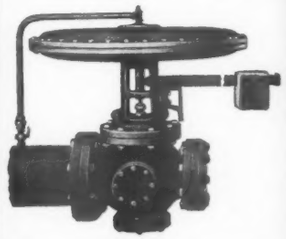

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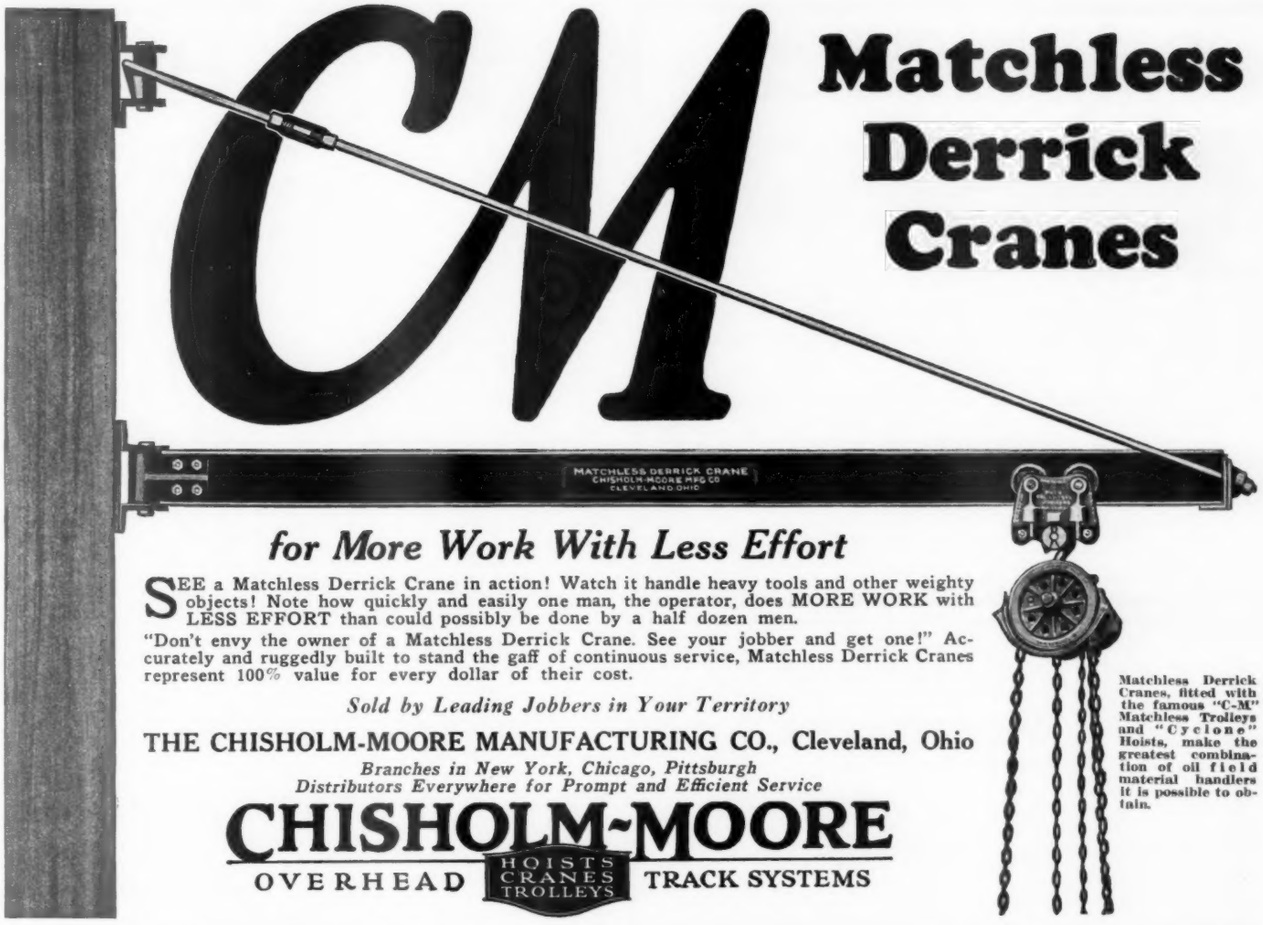


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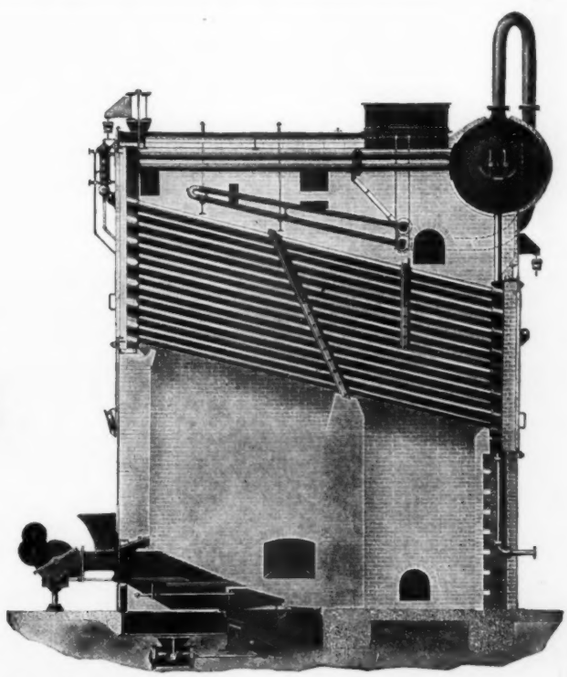

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matic equivalent by their method of analysis is only 14 per cent. A similar condition is shown by gasoline 6, which balanced a 40-60 mixture of benzene and standard fuel, equivalent to 45 per cent aromatics, although the Egloff and Morrell aromatic equivalent (by analysis) is only 18 per cent. Again a similar condition is shown by gasoline 7, an uncracked California distillate.

When gasolines of similar composition as shown by analysis are considered, further differences appear. The most outstanding case is that of gasolines 1 and 3, which correspond closely in analysis and in calculated aromatic equivalent, the latter differing by only 5 per cent; the engine tests of which, however, show that gasoline 1 is hard knocking and gasoline 3 ranks well as an antiknock fuel. Comparison of gasoline 17, Pennsylvania cracked, and gasoline 9, a commercial motor gasoline, brings out the fact that they have about the same knocking tendency, although strikingly different in composition and calculated aromatic equivalent. The reverse is shown by gasolines 8 and 9, which have fairly close calculated aromatic equivalents, but widely different knocking tendency. It should be noted, however, that the Egloff and Morrell method of analysis and calculation gives very satisfactory agreement with the motor tests in the case of gasoline 18, vapor-phase cracked, which, as will be seen, contains only 13 per cent of paraffins.

**Light Knocking Fuel**

2. Engine tests with gasoline 4 (a comparatively light-knocking fuel) as standard: When the tests were repeated with gasoline 4, a good average motor gasoline of only moderate detonating tendency, as standard, certain differences were observed. In the group of cracked Mid-Continent products, gasolines 10 to 16, the agreement is still moderately fair. With this standard, the agreement is better for gasolines 3, 6 and 7 than with the first standard, though not satisfactory, but it is much worse for gasolines 8 and 9, which have small aromatic equivalents by analysis, but require 25 per cent and 30 per cent of kerosene, respectively, for balance. Another interesting case is that of gasolines 8 and 17, which, require the same amount, 25 per cent, of kerosene for balance, but differ rather widely in their aromatic equivalents calculated from analysis. For a comparison in the group of fuels requiring benzene for balance, gasolines 6 and 18 may be noted. They have almost the same aromatic equivalent by engine test, 30 and 33 per cent, but the analysis indicates aromatic equivalents of 18 and 53 per cent, respectively.

**Influence of Volatility**

3. The tests on the influence of the volatility of gasoline, as has been stated above, favor the general belief that increase in boiling point, in one general type of petroleum distillate, tends to increase detonation. A recent case has come to the attention of the authors, in which it was stated that a group of gasolines differing in endpoint by as much as 40 per cent Fahrenheit were found to have the same detonation value. While it is undoubtedly possible to obtain gasolines of different endpoint but of the same detonating tendency, the above experiments show that it is also possible to produce gasolines of the same endpoint but of widely different detonating tendency. After all, the endpoint for a motor fuel is only slightly related to its overall volatility, the intermediate ranges being the more important.

**Influence of Standard**

4. Various laboratories have used as standards gasolines resembling in knocking value gasoline 1 of the present series. The use of such a standard may serve to bring out differences in knocking tendency better than the use of a lighter knocking standard, such as gasoline 4, but it makes possible also certain misleading conclusions, particularly when the benzol equivalent scale is employed.

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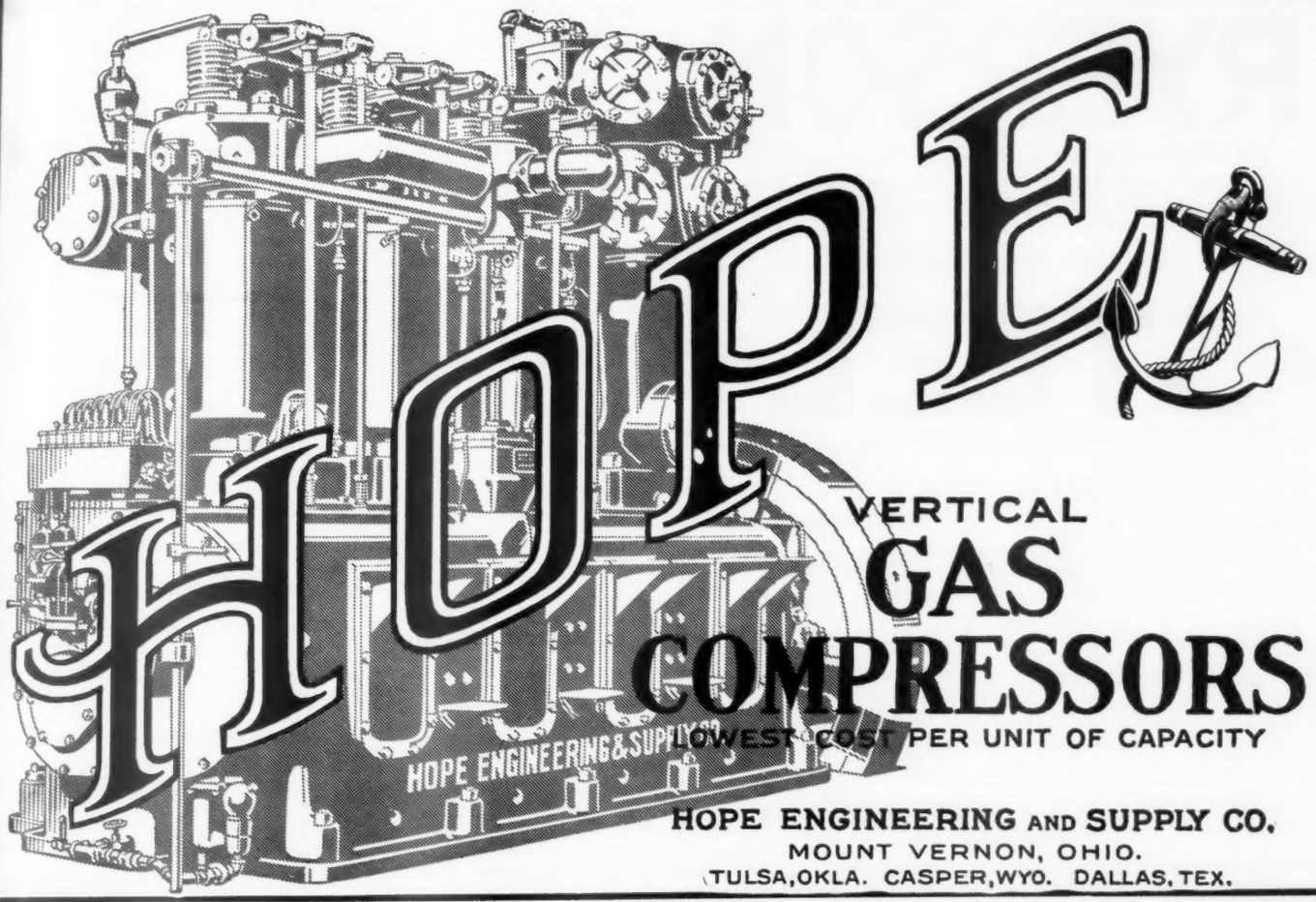


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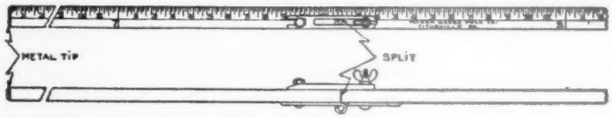


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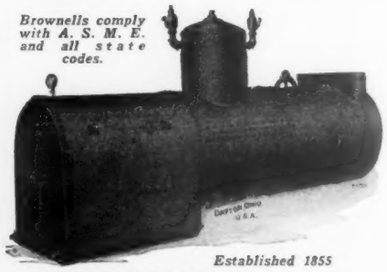

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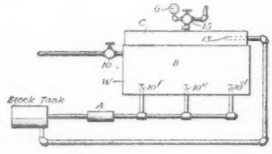
**Ajax ropes are carried in stock by the North Texas Supply Co., Cross Plains, Tex.; Rex Supply Co., Sour Lake, Tex., and Mid-Continent Supply Co., Fort Worth, Tex.**


as one containing 40 per cent of benzene. Therefore, a result giving a 25 per cent benzol equivalent against gasoline 1 as standard, need not indicate that the fuel in question will function as a satisfactory antiknock gasoline when used in an automobile. The same fuel tested against gasoline 4 as standard will give about a 15 per cent benzol equivalent. Since gasoline 4 represents merely a good average commercial motor gasoline, the latter figure better indicates the actual value of the fuel under test. Since most real antiknock gasolines are sold at a premium over ordinary motor gasoline prices, they should give marked improvements over ordinary motor gasoline performance. Examination of the results in the fourth column of Tables 9 and 10, where gasoline 4 is used as standard, will show that a number of the cracked gasolines studied cannot be regarded as satisfactory antiknock gasolines when judged on this basis. These results do show, however, that motor fuels of satisfactory antiknock value composed entirely of petroleum, are available to consumers. To this extent it is believed that the gradual introduction of higher compression motors will not be attended by any serious difficulty.

The authors wish to acknowledge the valuable assistance of Messrs. W. H. Ragsdale, J. O. Timms and E. C. Martin, of Mellon Institute, in the carrying out of the experimental work reported in this paper.

## Recent Patents

1,619,206. Treatment of Gasoline. Meade W. Harriger and William J. Baker, Tylersburg, Pa. Filed August 6, 1924. Serial No. 730,415. 1 Claim. (Cl. 196—11.)




Apparatus for extracting wild gas from casinghead gasoline, comprising a plurality of parallel pipes located in vertically spaced relation to each other and each sloping downwardly from the horizontal at an angle such that the total drop from the intake end to the outlet end is substantially 5¾ inches in 107 inches, a plurality of vertical headers each having a considerably greater internal diameter than the sum of the internal diameters of said pipes, the first of said headers being connected with all of said pipes at one end and the last of said headers being connected with all of said pipes at the other end, while all of the pipes open into each intermediate header, a gasoline intake pipe opening into the first header, a vapor outlet at the top of each header for the release of wild gas, a gasoline outlet at the bottom of certain of said headers, means for heating said pipes and headers to such temperature as will vaporize the wild gas in the gasoline flowing therethrough, and a residue gas container located above said sloping pipes and said headers and receiving the vapor from the vapor outlets in said headers, said container having an opening at its bottom leading into the first of said headers to return to the sloping pipes any liquid gasoline which escapes with the wild gas.

## LEGAL

**TRIBAL OSAGE OIL LEASES AT PUBLIC AUCTION, MARCH 28, 1927, BY UNITED STATES GOVERNMENT.**

March 28, 1927, at Pawhuska, Oklahoma, about 70,000 acres will be offered for oil leases in quarter section tracts. Bids will be for bonus in addition to royalties, 25% payable on day of sale, balance in three annual instalments, with acceptable security. Within advertised area there are about 9,826 oil wells producing from one barrel to 2,000 barrels each, the total daily production for December, 1926, being about 70,000 barrels; also, there are about 75 wells drilling. All lands are now leased separately for gas. Blue print maps of area advertised, showing tracts producing oil or gas, can be had for fifty cents each, also logs of producing oil or gas wells for twenty-five cents each well. Write U. S. Superintendent, Osage Agency, Pawhuska, Oklahoma, for maps, logs or other information.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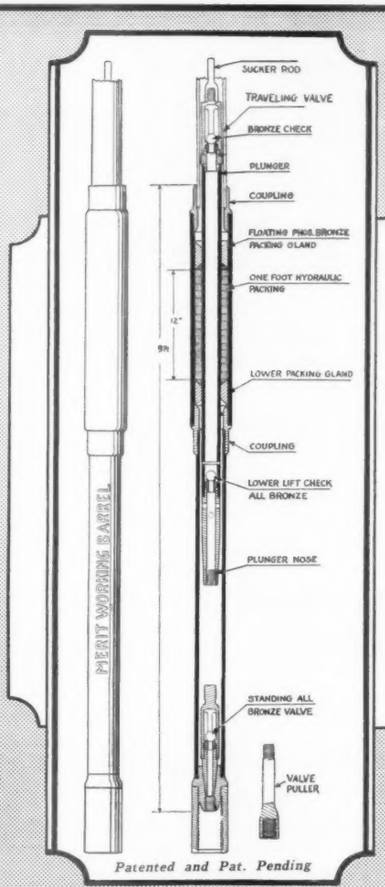

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Reduces operating expense.
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**The Merit Working Barrel**
Will pump floating sand.
Has neither cups nor rings.
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In designing the Merit Working Barrel, all the weak points and faults of working barrels heretofore have been taken into consideration and practically eliminated.

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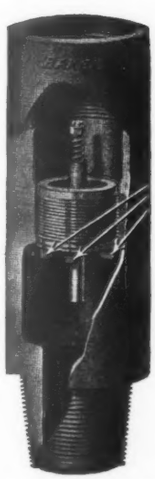
## *Is Invaluable In All Drilling Operations*


*The Baker Drill Pipe Float has all the features essential to efficient operation. Descriptive folder on request.*

Designed primarily to relieve the excessive strain on wire lines, brake bands and derrick equipment when running long strings, the Baker Drill Pipe Float is proving an invaluable aid in drilling wells at all depths.

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# Detailed Operations in All Fields for Month of February

### SUMMARY OF ALL FIELDS

**Wells Completed**

| | Comp. | Prod. | Dry | Gas |
|---|---|---|---|---|
| Eastern | 348 | 2,079 | 23 | 6 |
| Lima | 19 | 167 | 1 | 0 |
| Central Ohio | 34 | 401 | 7 | 19 |
| Michigan | 22 | 350 | 3 | 0 |
| Indiana | 12 | 96 | 5 | 0 |
| Illinois | 4 | 180 | 0 | 2 |
| Kentucky | 88 | 1,880 | 14 | 2 |
| Tennessee | 2 | 85 | 0 | 0 |
| Kansas | 114 | 9,311 | 55 | 6 |
| Oklahoma | 348 | 132,924 | 96 | 25 |
| East Central Texas | 9 | 0 | 9 | 0 |
| North Central Texas | 394 | 31,094 | 151 | 3 |
| West Texas | 86 | 35,722 | 17 | 0 |
| Texas Panhandle | 74 | 11,232 | 7 | 9 |
| Southwest Texas | 89 | 1,875 | 27 | 25 |
| Gulf Coast | 114 | 58,200 | 46 | 1 |
| Arkansas | 29 | 756 | 7 | 7 |
| North Louisiana | 57 | 1,654 | 23 | 13 |
| Wyoming | 17 | 11,416 | 2 | 2 |
| Montana | 14 | 192 | 6 | 1 |
| Colorado | 13 | 1,440 | 3 | 1 |
| Utah | 1 | 0 | 0 | 1 |
| New Mexico | 8 | 335 | 1 | 0 |
| Total February | 1,900 | 301,889 | 503 | 123 |
| Total January | 2,018 | 307,489 | 550 | 186 |
| Difference | 118 | 5,600 | 47 | 53 |

**Rigs and Wells Drilling**

| | Rigs | Drg. | Ttl. |
|---|---|---|---|
| Eastern | 146 | 412 | 558 |
| Lima | 3 | 30 | 33 |
| Central Ohio | 13 | 61 | 74 |
| Michigan | 12 | 40 | 52 |
| Indiana | 3 | 46 | 49 |
| Illinois | 5 | 28 | 33 |
| Kentucky | 12 | 139 | 151 |
| Tennessee | 1 | 22 | 23 |
| Mississippi | 6 | 9 | 15 |
| Alabama | 0 | 6 | 6 |
| Florida | 2 | 11 | 13 |
| Kansas | 75 | 315 | 390 |
| Oklahoma | 367 | 1,204 | 1,571 |
| East Central Texas | 0 | 22 | 22 |
| North Central Texas | 79 | 600 | 679 |
| West Texas | 78 | 282 | 360 |
| Panhandle | 133 | 353 | 486 |
| Southwest Texas | 35 | 160 | 195 |
| Gulf Coast | 67 | 176 | 243 |
| Arkansas | 18 | 64 | 82 |
| North Louisiana | 33 | 92 | 125 |
| Wyoming | 27 | 289 | 316 |
| Montana | 13 | 131 | 144 |
| Colorado | 11 | 102 | 113 |
| Utah | 4 | 38 | 42 |
| New Mexico | 15 | 136 | 151 |
| Total February | 1,158 | 4,768 | 5,926 |
| Total January | 1,096 | 4,892 | 5,988 |
| Difference | 62 | 124 | 62 |

Note—In the following report the Section, Township and Range are given first: then the farm, the owner, the serial number of the well and the initial production of the well. The rigs and wells drilling are set forth in similar manner. In lines where the Section, Township and Range are missing the wells are located in the Sections, Townships and Ranges which appear next above in the report.

## OKLAHOMA FIELDS

**Summary of Wells Completed**

| County— | Comp. | Prod. | Dry | Gas |
|---|---|---|---|---|
| Carter | 16 | 5,895 | 0 | 1 |
| Creek | 45 | 6,180 | 15 | 2 |
| Garfield | 7 | 1,213 | 0 | 0 |
| Grady | 19 | 827 | 3 | 4 |
| Kay | 20 | 10,366 | 4 | 2 |
| Muskogee, Waggoner | 20 | 85 | 14 | 2 |
| Okfuskee | 11 | 955 | 5 | 2 |
| Okmulgee | 29 | 546 | 12 | 4 |
| Osage | 30 | 6,415 | 6 | 3 |
| Pawnee | 17 | 985 | 6 | 1 |
| Payne and Lincoln | 4 | 860 | 1 | 0 |
| Seminole | 84 | 95,310 | 10 | 0 |
| Stephens and Cotton | 16 | 397 | 8 | 3 |
| Tulsa | 9 | 1,155 | 3 | 0 |
| Miscellaneous | 17 | 1,821 | 9 | 1 |
| Total February | 348 | 132,924 | 96 | 25 |
| Total January | 439 | 137,489 | 141 | 48 |
| Difference | 91 | 4,565 | 45 | 23 |

**Summary of Rigs and Wells Drilling**

| County— | Rigs | Drlg. | Ttl. |
|---|---|---|---|
| Carter | 15 | 54 | 69 |
| Creek | 39 | 113 | 152 |
| Garfield | 3 | 30 | 33 |
| Grady | 17 | 83 | 100 |
| Grant | 1 | 9 | 10 |
| Hughes | 7 | 26 | 33 |
| Kay | 11 | 79 | 90 |
| Lincoln | 2 | 18 | 20 |
| Logan | 1 | 10 | 11 |
| Muskogee and Wagoner | 11 | 25 | 36 |
| Osage | 31 | 63 | 94 |
| Okfuskee | 14 | 39 | 53 |
| Okmulgee | 15 | 45 | 60 |
| Pawnee | 5 | 32 | 37 |
| Payne | 4 | 21 | 25 |
| Pontotoc and Garvin | 8 | 15 | 23 |
| Pottawatomie | 14 | 46 | 60 |
| Seminole | 147 | 358 | 505 |
| Stephens and Cotton | 8 | 42 | 50 |
| Tulsa | 4 | 21 | 25 |
| Oklahoma Panhandle— | | | |
| Cimarron | 0 | 6 | 6 |
| Texas | 1 | 6 | 7 |
| Miscellaneous | 9 | 63 | 72 |
| Total February | 367 | 1,204 | 1,571 |
| Total January | 323 | 1,213 | 1,536 |
| Difference | 44 | 9 | 35 |

### WELLS COMPLETED

**CARTER COUNTY**

18-1s-3w Dixon, Humble O. & R. 2 .. 277
3-2s-3w Adams, Magnolia Pet. 7 ... 285
11-2s-3w Lyles, Atlantic O. P. Co. 1 .. 325
20-5s-1e Criner, Amerada Pet. 10 .... 75
29-5s-1e J. Baptiste, Amerada Pet. 4 .. 35
18-1s-3w Jordan, Humble O. & R. 8 ..1955
7-2s-2w Pierce, Coline Oil Co. 9 .... 13
3-2s-3w Liles, Gypsy Oil 4 ..... 145
2-2s-3w Vaughn, J. B. Schermerhorn 1 50
Calvery, Humble O. & R. 2 . 125
18-1s-3w Dixon, Westheimer 1 .....1230
E. Hardin, Magnolia Pet. 3.. 85
Jordan, Humble O. & R. 7 1145
7-2s-2w Coughman, Roxana Pet. 5 .. 115
8-2s-2w Pierce, Carter Oil 3 ..... 35
16-2s-2w G. Cox, Magnolia Pet. 4 .... gas
Wells completed ..... 16
Production ..... 5895
Gas ..... 1
Gas production .....15,000,000

**CREEK COUNTY**

13-19- 8 W. Ross, Gled Oil 6 ..... 150
8-18- 7 Starr, Silurian Oil 13 ..... 40
17-17- 8 Bruner, Shaffer & Billingslea 145
25-17- 8 Morrison, Transcontinental Oil 2 ..... dry
1-18-11 McGuire, Gypsy Oil 21 .... 30
McGuire, Gypsy Oil 22 ..... 50
Land, The Texas Co. 13 .. dry
6-18-12 Townlot, Savoy Oil 1 ..... 915
16-17- 9 Grayson, Bu-Vi-Ear Pet. 1 dry
20-17-10 Unallotted, Jackson & Wise 4 dry
9-14-10 Harry, D. W. Franchott et al A-1 ..... 150
20-14-10 Scott, R. D. Donnelly et al 2 75
32-14-10 Harjo, T. B. Slick 1 ..... 150
30-14- 8 Kernal, The Prairie O. & G. 3 225
14-19 8 Miller, Devonian Oil 5 ..... 40
28-18-11 Fife, Selby O. & G. 1 ..... gas
3-17-11 Layton, Wallace et al 1 .... dry
30-15- 9 Unallotted, C. G. Tibbens 34 550
6-18-12 Townlot, Sunray Oil 1 ..... 25
Sango, Sunray Oil 13 ..... 75
16-17-11 Harry, O. M. Ireland 3 .... 20
18-17-11 Meyers, Cumberland Pet. Co. 2 35
21-15-12 Marshall, W. Hammon 1-A .. gas
9-17-11 Harry, Sorenson et al 1 .... 20
6-18-12 Townlot, Savoy Oil 1 .....2860
Townlot, Savoy Oil 1 ..... 100
31-18-11 Goat, C. C. Taylor & Dixie Drlg. Co. 1 ..... 15
1-18-11 Land, Riverland Oil 8 ..... 80
Land, Gypsy Oil Co. 8 ..... 25
2-19- 9 Harrison, Ed Lee et al 1 .... 25
14-17- 8 Freeman, Alvard & West 3 .. 105
17-18- 7 Tull, Magnolia Pet. 24 .... 200
5-18- 7 Jones, Magnolia Pet. 1 .... 5
12-19- 8 E. Ross, Gled Oil 7 ..... dry
24-18- 8 Grayson, J. B. Greives et al 2 dry
26-17- 8 Sarthilla, Magnolia Pet. 2 .. dry
3-18-11 Tahladge, Riverland Oil 1 .. dry
11-17-10 Wrightsman, Whitten & Wilcox 3 ..... dry
27-15-10 Frank, Buckholst & Norman 1 dry
28-15-10 Groom, Plymouth Pet. 1 .. dry
23-18- 9 Unallotted, Gypsy Oil 1 ... dry
11-17-10 Taconey, O. M. Irelan 2 .... dry
24-17-10 Tahkaney, J. H. Wright 16 .. 160
28-17-11 Barnett, C. O. Buckles 1 .. 10
24-14-10 Yargee, Sunray & Munn Oil 1 dry
Wells completed ..... 45
Production ..... 6180
Dry ..... 15
Gas ..... 2
Gas production .....6,500,000

**GARFIELD COUNTY**

18-22-3w Hartley, Sinclair Oil 40 ... 120
Hartley, Sinclair Oil 55 .... 205
13-22-4w Walker (N), Sinclair Oil 43 . 270
Walker (N), Sinclair Oil 67 .. 40
Walker (N), Sinclair Oil 70 . 320
24-22-4w Beveal, Sinclair Oil 32 .... 10
19-22-3w Kisner (E), Sinclair Oil 20 248
Wells completed ..... 7
Production .....1,213

**GRADY COUNTY**

11- 4-8w Pettitt, Watchorn O. & G. 2 gas
16-3n-5w Wilford, Garvin Drlg. Co. 1 200
35-3n-5w Lindsey, Carter Oil 5 ..... 50
35-5n-8w Dryden, Magnolia Pet. Co. 2 gas
29-3n-7w Bledsoe, Smith et al 1 .. dry
2-2n-5w Graham, Carter Oil 2 ..... 32
27-3n-5w White-Eagle Poison, Carter Oil 4 ..... 50
Pounds, Carter Oil 1 ..... 30
22-3n-5w Miller Carter Oil 3 ..... 100
17-3n-5w Woods, Carter Oil 1 ..... gas
16-3n-5w Gibson, Ray & Cox 1 .... 70
16-3n-5w Smith, Hamon & Cox 3 .. 90
36-4n-6w Brooks, Frates, et al 1 .. gas
2-5n-9w Hedlund, Briscoe & Hall 2 .. 60
21-3n-5w Russell, The Prairie O. & G. Co. 1 ..... 40
16-3n-5w Wade, Bay Pet 1 ..... dry
15-5n-7w Null, Badgett & Hughes 1 .. dry
16- 3-5w Hicks, Amerada Pet. & W. H. Gant 1 ..... 80
Gardenhire, Carter Oil 2 .... 35
Wells completed ..... 19
Production ..... 827
Dry ..... 3
Gas ..... 4
Gas production .....81,000,000

**KAY COUNTY**

5-28-1w Bechtel, Comar Oil 4 ..... 245
Johnson, Comar Oil 1-w ... 376
28-25-1w Gardner, Gypsy Oil 5 ..... 60
29-25-1w Hack, Gypsy Oil 1 .....1343
15-29-1w Hanzel, Harris & Hahn 1 .. gas
21-29-1w Duncan, Comar Oil 13-w .... 250
Buell, Comar Oil 4-w .....1318
Buell, Comar Oil 11-W .....1235
Priboth, Comar Oil 4-W ..1682
Priboth, Comar Oil 12-W. 1380
8-28-1w Horne, Comar Oil 3 ..... dry
31-27-2e Ferguson, Anderson, Peterson 2 ..... gas
1-26-2w Richmond, Marland Oil 1-B . 830
12-26-2w North, Marland Oil 6 ..... 635
North, Marland Oil 9 ..... 400
15-25-2w Thomas, Marland Oil 6 ... dry
18-25-2e Walkingsly, Marland Oil 1 .. 60
9-27-1w Burkholder, The Texas Co. 1 110
8-28-1w Andrews Wentz Oil Corp. 2. 220
5-28-1w Townsite, Braman Oil 1 .... 82
17-29-1e Brokhouser, Vernon Oil & Gas 5 ..... 140
20-29-1w Day The Texas Co. 2 ..... dry
16-29-1w School land Mid-Continent Pet. 4 ..... dry
20-29-1w Day Comar Oil 1-A ..... dry
Wells completed ..... 24
Production ..... 10,366
Dry ..... 4
Gas ..... 2
Gas production .....34,000,000

**MUSKOGEE & WAGONER COUNTIES**

34-17-15 Wilson, O. N. West 6 ..... dry
35-17-16 Prince, Mitchell Oil Co. 3 .. gas
8-16-15 Richards, Bell O. & G. Co. 7 10
17-15-17 McIntosh, H. H. Francis et al 3 ..... dry
13-14-17 Washington, Indian Capital O. & G. 1 ..... dry
6-14-18 Roberts, J. S. Givens et al 6 20
25-17-16 McIntosh, Sevreda Oil 4 .. 30
11-19-16 Webber, Geo. Simpson 1 .. dry
18-19-17 McIntosh, W. E. Mills 1 ... dry
4-18-16 Bird, H. G. Cooper 1 ..... dry
4-16-15 Colbert, Kanola Oil 11 ..... dry
32-15-18 Meagher, J. M. Foltz et al 1-A ..... dry
17-13-19 Lowther, Herbert Oil 1 .... dry
3-16-14 Marshall Ray Starr 1 ..... dry
6-19-16 Roger, Wolf Oil 1 ..... dry
33-19-17 Rittenhouse, Swift et al 1 .. dry
2-16-15 Brown, Shuvell et al 1 ..... dry
13-16-15 Littlehead, H. C. Tyson 2 .. dry
17-15-17 Lewis, Jolly Oil 2 ..... gas
17-15-17 Warrior, W. R. Sommerville 2 15
Wells completed ..... 20
Production ..... 85
Dry ..... 14
Gas production .....3,800,000
Gas ..... 2

**OKFUSKEE COUNTY**

17-12-10 Harrison, T. T. Blaksley 1 .. dry
33-12-11 Stubblefield, Josey Oil 2 .... 175
15-10- 9 Gilbert, Barnsdall Oil 1 .... gas
8-12-11 Scott, J. M. Kessler 1 ..... dry
33-12-11 McCoy, Josey Oil Co. 11 .. 400
15-11-11 Holmes, J. J. Deaner 1 .... dry
33-12-11 McCoy, Josey Oil 17 ..... 350
22-12-11 Jacobs, Independent O. & G 2 gas
8-12- 7 Rogers, Cromwell O. & G. 1 .. 30
17-12- 7 Hennechuchee, Mid-Kansas Oil 1-A ..... dry
25-12- 9 Leedy, T. A. Johnson 1 ..... dry
Wells completed ..... 11
Production ..... 955
Dry ..... 5
Gas ..... 2
Gas production .....96,000,000

**OKMULGEE COUNTY**

21-13-11 Anderson, J. A. Swindler 4 . gas
24-16-14 Jackson, Lamber Oil Co. 1 .. dry
16-15-12 Marsy, T. A. Johnson 2 .... dry
27-14-12 Bradford, Acts & Pine 1 .... dry
22-13-11 Heckman, J. A. Swindler 1-A dry
11-13-12 Budleman, King & Jackson 3 20
5-11-12 Jackson, C. O. Buckles 18 .. 5
3-15-14 Anderson, R. C. Vincent 2 .. 30
9-15-14 Corbray, W. B. Pine 5 .... 40
10-15-14 Carter, Lavery & Farrell 1 .. dry
Sells, W. B. Pine 2 ..... 15
10-14-14 Stevens, J. S. Selby 4 ..... dry
6-11-12 Hawkins, Moffett et al 7 .. 15
6-12-12 Mitchell, Gladys Belle Oil 6 . gas
19-14-15 Rentie, M. S. Musselam 5 .. 40
9-15-14 Corbray, W. B. Pine 4 .... 10
20-16-12 Bruner, Red Bank Oil 1 .... dry
21-16-14 Field, Kirshner & Tillman 1-A dry
25-13-14 Stake, Sam Bright 10 .... dry
19-16-14 Grayson, Savoy Oil 2 ..... dry
4-14-12 Adams, Devonian Oil 3 .... 75
27-13-11 Jones, J. H. Rebold 3 .... gas
15-13-12 Skelton, Shelton Oil 1-A .. 100
7-11-12 Hawkins, French et al 4 .. 100
1-14-14 Harris, Nelo-Okla. Oil 5 .. 75
35-13-13 Scott, J. K. Gardner et al 1 .. dry
5-13-15 Rentie, J. A. Hull & Co. 6 .. dry
13-11-13 Davis, Nicholson Corp. 4 .. gas
Wells completed ..... 29
Production ..... 540
Dry ..... 12
Gas ..... 4
Gas production .....22,000,000

**OSAGE COUNTY**

1-27-5e Phillips Pet. 3 ..... 100
7-27- 6 Phillips Pet. 3 ..... 100
34-27- 6 Kewanee O. & G. 3 .....1400
21-26- 6 Phillips Pet. 6 ..... 250
28-26- 6 Skelly Oil 6 ..... 150
30-24- 9 I. D. Simmons 2 ..... 30
28-22-12 Kanupp et al 1 ..... dry
12-27- 5 The Phillips Pet. Co. 10 .. 100
7-27- 6 Phillips Pet. Co. 5 ..... 125
34-27- 6 Kewanee O. & G 3 .....1600
5-27-11 Osage Gas Producers Co. 375 .. gas
26-25- 9 Peters et al 1 ..... 5
16-23-12 Superior Oil Co. 1 ..... gas
11-21-10 Okla. Natl. Gas Co. 763 .. gas
8-21-11 Skelly Oil Co. 1 ..... dry
5-20-12 F. A. Gillespie 10 ..... 30
28-20-12 Continental Oil 18 ..... 5
7-27- 6 Phillips Pet. Co. 7 ..... 800
1-27- 5 Phillips Pet. Co. 2 ..... 80
20-26- 6 Galt Brown 1 ..... 15
3-26- 6 Marland Oil 3 ..... 15
3-27- 5 The Texas Company 1 ..... 20
34-27- 6 Kewanee O. & G. 4 ..... 30
7-27- 6 Phillips Pet. 8 ..... 110
17-27- 6 Peters Pet. 6 ..... 900
31-25- 7 Devonian Oil 1 ..... dry
34-25- 9 Marland Oil 1 ..... 550
18-24- 8 Peters, C. H. 1 ..... dry
25-20-10 Sand Springs Home 1 ..... dry
20-20-12 Devonian Oil 11 ..... dry
Wells completed ..... 30
Production ..... 6415
Dry ..... 6
Gas ..... 3
Gas production .....4,750,000

**PAWNEE COUNTY**

32-20- 6 H. Vogler, Magnolia Pet. 4 .. 365
20-23- 3 Gilbert, Magnolia Pet. 1 .... dry
9-20- 6 Fugate, Magnolia 3-B ..... 40
25-20- 7 Brown, C. F. Burton et al 5 .. dry
6-20- 8 Cotton, Black et al 2 ..... 35
35-20- 6 Burton, The Prairie O. & G. 6 40
9-20- 7 Clark, Ora Steen et al 1-A.. 20
13-21- 7 McIntyre, Minnehoma O & G 6 400
35-22- 6 Dobson, Devonian Oil 1-A .. 20
21-22- 7 Canfield, Arkansas Nat. Gas 2 20
19-21- 7 Carrington, Wasson & West 1 dry
9-20- 7 Gillespie, Superior Oil 2 .. dry
22-20- 8 Fury, McNamara 1 ..... dry
32-20- 5 Makin, Continental Oil 1 .... 30
2-20- 6 Hammers, Blackwell O. & G. 1 gas
32-20- 6 Sallee, Twin State Oil 3 .... dry
13-20- 9 Kinder, Sunray Oil 1 ..... 15
Wells completed ..... 17
Production ..... 985
Dry ..... 6
Gas ..... 1
Gas production .....7,000,000

**PAYNE & LINCOLN COUNTIES**

30-18- 5 Cochran, Hale & Cassidy 9 .. 20
32-18- 4 Ballard, Mulberry Oil 4 .... 650
5-17- 4 Sharrum, Mulberry Oil 4 .... 110
33-17- 4 Griswald Mid-Kansas Oil 1 .. dry
Wells completed ..... 4
Production .....780
Dry ..... 1

**SEMINOLE COUNTY**

13- 9- 6 F. Knapp, Carter Oil 1 .... 560
F. Knapp, Carter Oil 2 .... 500
14- 9- 6 G. F. Killings, Carter Oil 1 .2610
23- 9- 6 Rentie, Amerada Pet. 4 ....1755
24- 9- 6 Carter Barnsdall Oil 3 .... 625
Carter Barnsdall Oil 6 ....1147
J. Carter, Carter Oil 4 .... 300
Carter, Gypsy Oil 5 ..... 115
Carter, Gypsy Oil 7 .....2402
26- 9- 6 Fixico, Gypsy Oil 7 ..... 240
Strother, Pure Oil 10 .....1229
D. Fixico, Tidal Oil 7 ..... 550
35- 9- 6 Butler, McCulloch Oil and Philmack Oil 1 .....2420
Cudjo "A", Sinclair Oil 4 ....1680
Cudjo, Superior Oil 2 .....2186
Cudjo, Superior Oil 4 .....1240
Frank, T. B. Slick 2 .....1000
7- 9- 8 Kidd, Indep. O. & G. 2 .... 40
Jefferson, Independent O. & G. and Amerada 1 ..... 40
14- 9- 6 Rentie, Mid-Continent Pet. Co. 4 ..... 440
23- 9- 6 Killingsworth "B", Amerada Pet. 1 ..... 1239
Mary Killing, Carter Oil 3 .1510
Harjo, I. T. I. Oil Co. 1 ..... 415
24- 9- 6 Carter, Barnsdall Oil Co. 3-A dry
Strothers, Pure Oil Co. 11 ..3050
26- 9- 6 Strothers, Pure Oil Co. 7 ....3400
Strothers, Pure Oil Co. 8 ..3050
Strothers, Pure Oil Co. 11 ..1460
27- 9- 6 Lukes, Carter Oil 2 ..... 485
34- 9- 6 Jones, Barnsdall Oil Co. 1 ..5908
35- 9- 6 Cudjo, Atlantic O. P. Co. 1 ..1015
Butler, Gypsy Oil Co. 1 ..... 235
Butler, Gypsy Oil Co. 2 ..... 440
Cudjo "A", Sinclair Oil 5 ..3300
Franks T. B. Slick 3 ..... 908
Franks. T. B. Slick. 5 ..... 620
32- 8- 8 Grayson, Amerada Pet. 2 .... dry
10- 9- 5 Simpson, Magnolia Pet. 2 .. 520
15- 9- 5 Anderson, Amerada Pet. 2 .9320
14- 8- 6 G. F. Killing, Carter Oil 2 ..3395
23- 9- 6 Grisso, Carter Oil 4 ..... 150
P. Fixico, Independent O. & G. 2 ..... 50
Harjo, Independent O. & G. 4 300
24- 9- 6 Carter, Gypsy Oil 6 ..... 100
Tayoche, Mid-Continent Pet. Co. 4 ..... 415
Taybche Mid-Continent Pet. Co. 5 ..... 200
26- 9- 6 T. Fixico, Independent O. & G. and Garland 7 ..... 350
35-9-6 Cudjo "A", Sinclair Oil 2 ....3420
Cudjo, Carter Oil 1 .....2185
Cudjo "B", Sinclair Oil 2 .... 265
Cudjo "B", Sinclair Oil 4 ..1090
Franks, T. B. Slick 7 ..... 2000
Cudjo, Turman Oil 1 ..... 450
Cudjo, Thurman Oil 3 .....2301
17- 9- 7 Warrior, Sinclair Oil 1 .... 80
33-10- 6 Kinkade, The Prairie O & G 5 dry
25- 9- 6 Gross, The Prairie O. & G. 2 200
27- 9- 6 Strothers, Prairie O. & G. 4.. 250
G. 4 ..... 250
18- 9- 6 Wisner, McCulloch Oil 1 .... dry
7- 9- 8 Cully, Mid-Continent Pet. 2 dry
28- 8- 7 Knight, Magnolia Pet. 1 .... dry
30- 7- 8 Street, Carter & Atkinson 1 dry
33-11- 8 Thompson, Pure Oil 4 .....333
28-10- 6 Baker, Amerada Pet. 1 .... dry
33-10- 6 Grayson, Gypsy Oil 1 ..... dry
11- 9- 5 J. Davis, Barnsdall Oil 1 .. 257
4- 9- 6 Cudjo, Gypsy Oil 1 ..... 935
14- 9- 6 Rentie, Mid-Continent Pet. 6 . 300
23- 9- 6 Fixico, Amerada Pet. 1 ....1032
Killingsworth "A", Amerada Pet. 2 ..... 625
Rentie, Amerada Pet 3 ....2096
Grisso, Carter Oil 6 .....1250
Goodin, I. T. I. Oil 1 ..... 511
Harjo, Tidal Oil 1 ..... 410
Harjo, Tidal Oil 4 ..... 300
Harjo, Tidal Oil 7 ..... 200
24- 9- 6 Carter, Barnsdall Oil 1-A .. 510
26- 9- 6 Strothers, Pure Oil 17 ....788
35- 9- 6 Cudjo, Atlantic O. P. Co. 3 ..3693
Cudjo, Atlantic & Independent O. & G. 1 ..... 785
Cudjo, Carter Oil 2 .....3460
Cudjo "A", Sinclair Oil 3 ..4770
22- 8- 7 Youngblood, Magnolia Pet. 1 ..30
32- 8- 8 Long, Independent & Atlantic O. P. 5 ..... dry
6- 7- 8 Harbor, Magnolia Pet. 2 .... 20
Wells completed ..... 84
Production ..... 95,310
Dry ..... 10

**STEPHENS & COTTON COUNTIES**

36-1s-9w School, Walter Gant Jr. 3 .. 50
2-2n-5w Garvin-Simms, Carter Oil Co. 9 40
23-1n-9w Brown, Steve Linson 4 .... dry
24-1n-9w McFatridge, C. E. Elzie 1-A dry
34-1s-8w Burke, Davis Malernee 2 .. gas
2-2s-8w Gilworth, Harry Hanbury 1-A dry
25-1s-9w Massey, Gamble et al 1 .... 125
7-1s 8w Lane, Margay Oil 4 ..... dry
19-1s-8w Bridenthal, Ellis Drlg. Co. 7 dry

25-1s-9w D. Russell, Magnolia Pet. 10 .. gas
D. Russell, Magnolia Pet. 11 150
19-1s-8w Worrell, Magnolia Pet. 4 .. dry
34-1s-8w Burk, Scott & Arington 1 .. gas
26-1s-5w Shelby, Skelly Oil 28 ..... dry
13-1s-4w Krebs, Skelly Oil 1 ..... 32
21-2s-7w Enloe, Harper et al 1 ..... dry

Wells completed ..... 16
Production ..... 397
Dry ..... 8
Gas ..... 3
Gas production ..... 7,000,000

**TULSA COUNTY**

6-19-10 Tutrell, J. H. Hayden 1 .... 40
15-19-11 Fife, Glidden 2 ..... 960
32-19-11 Unallotted, Sapulpa Fuel Co. 3 25
26-19-10 Rogers, Holmes et al 1 ..... dry
12-16-13 Brown, Tidal Oil Co. 1 ..... 10
15-19-13 Woodward, McCarthy et al 1 dry
6-19-10 McKee, Superior Oil et al 6 .. 95
7-19-10 Burnett, Superior Oil et al 6 25
5-18-14 Hawkins, Hall et al 1 .... dry

Wells completed ..... 9
Production ..... 1155
Dry ..... 3

**MISCELLANEOUS COUNTIES**

**Texas County—**
22-5n-12e Hovey, Valerius & Prairie 1 dry
21-4n-14e Hovey, Wilcox O. & G. 1.... gas
**Mayes County—**
20-20-20 Longcrier, J. C. Fore & F. R. Shepard 1 ..... dry
**Garvin County—**
17-1n-3w Derdeyn, The Texas Co. 3-B dry
**Rogers County—**
28-20-15 McNab, F. C. Winters 1 .... dry
**Pontotoc County—**
16-5n-8e Gilmer, Homaokla Oil 1 .. 135
**Nowata County—**
36-25-16 Campbell, The Prairie O. & G. 17 ..... 20
**Coal County—**
34-2n-9e Pete, C. J. Skirvin 1 ..... dry
**Hughes County—**
6- 9- 10 Hully, Amerada Pet. 1 .. 801
**Pottawatomie County—**
11- 7- 4 Hutchcock, Magnolia Pet. 1 166
3- 8- 4 Kenyon, Tidal Osage Oil 1 .. dry
14- 7- 4 Risenhoover, Magnolia Pet. 1 60
15- 7- 4 Mull, Magnolia Pet. 1 ..... 614
**Caddo County—**
10- 5-9w Pawkins, Magnolia Pet. 7..... 25
**Jefferson County—**
34-6s-5w Seay, Sigler et al 1 ..... dry
5-7s-5w O. Seay, Woodruff Bros. 1 .. dry
**Marshall County—**
17-5s-5e Sacra, Kennedy Drlg. Co. 1 .. dry

Wells completed ..... 17
Production ..... 1821
Dry ..... 9
Gas ..... 1
Gas production ..... 6,000,000

**CARTER COUNTY**

**Rigs**

18-1s-3w Jordan, Humble O. & R 12.
Dixon, Max Westheimer 3.
20-1s-3w Denny, Merrick-Cameron Oil 1.
23-1s-3w Lewis, Magnolia Pet. 1.
33-1s-3w Bumpass, Magnolia Pet. 4
2-2s-3w Calvery, Humble O. & R. 4.
3-2s-3w Pruitt, Wirt Franklin & Prairie 11, 13.
10-2s-3w Grimes, Magnolia Pet. 1
11-2s-3w Lyles, Atlantic O. P. Co. 2
16-2s-2w May Cox, Magnolia Pet. 5.
Gladney, Atlantic O. P. Co. 1.
18-2s-2w Pierce, Coline Oil 10
27-2s-2w Noble, Menick et al 5
35-4s-2e Miller, Magnolia Pet. 1

**Wells Drilling**

2-1s-3w Peck, Magnolia Pet. 1.
17-1s-3w Peck, Magnolia Pet. 1
18-1s-3w Dixon, Humble O. & R. 3.
Jordan, Humble O. & R. 10, 11.
E. Hardin, Magnolia Pet. 4.
Dixon, Max Westheimer 2.
19-1s-3w Jordan, Humble O. & R. 9.
J. J. Hardin, Humble O. & R. 7.
W. Hardin, Humble O. & R. 3.
Dixon, Menick-Gault 1.
28-1s-3w Miller, Magnolia Pet. 2.
29-1s-3w Spears, Magnolia Pet. 2.
32-1s-3w Morrison, Magnolia Pet. 1.
33-1s-3w Bumpass, Magnolia Pet. 3.
34-1s-3w Newstadt, Magnolia Pet. 7.
Fish, Magnolia Pet. 9.
2-2s-3w Calvery, Humble O. & R. 3.
Calvery, Schermerhorn et al 2.
3-2s-3w Liles, Gypsy Oil 6.
Adams, Magnolia Pet. 8, 10.
Carpenter, Magnolia Pet. 3.
Pruitt, Wirt Franklin & The Prairie O. & G. 7.
Smith, Skelly Oil 3-A.
10-2s-3w Adams, Magnolia Pet. 9.
11-2s-3w Carpenter, Wirt Franklin 1.
21-2s-3w Kimbrell, Carter Oil 4.
Zachery, Magnolia Pet. 1.
22-2s-3w Morris, Magnolia Pet. 2.
23-2s-3w J. Lohman, Magnolia Pet. 13
Williams, Skelly Oil 2.
Lyles, Roxana Pet. 1.
Hales, Simpson & Fell 2.
12-2s-3w Kennedy, Pure Oil 2.
26-2s-3w Fee, C. R. Smith 6.
27-2s-3w Love & Thurman, Wirt Franklin 7.
6-2s-2w Higgins, Coline Oil 4, 6.
7-2s-3w Higgins, Coline Oil 9.
10-2s-2w E. Noble, Magnolia Pet. 1.
15-2s-2w Ed & G. Cox, Magnolia Pet. 3.
16-2s-2w T. Cox, Magnolia Pet. 5.
W. Wilson, Magnolia Pet. 5.
17-2s-2w Moore, Skelly Oil 2.
26-2s-2w Harmon, Magnolia Pet. 1.
Simpson, Max Westheimer 1.
33-4s-1w Simpson, Magnolia Pet. 1.
9-4s-2w Lowry, Simpson & Fell 3.
2-5s-3w Frazier, Roxana Pet. 1.
20-5s-1e Criner, Amerada Pet. 11.

**Shut Down**

33-1s-3w Bumpass, Humble O. & R. 1.
19-1s-2w Morris, McGee 1.
7-2s-2w Watkins, Iowa Oil 1.

Rigs, 15; wells drilling, 54; total 69.

**CREEK COUNTY**

**Rigs**

19-19- 8 Miles, Steinberger & Smith 3.
6-18- 7 Riverbed, Sinclair Oil 9.
24-17- 7 Ingalls, Transcontinental Oil 2.
16-17- 8 Morrison, Shaffer O. & R. 2.
10-16- 8 Bruner, F. R. Billingslea et al 1.
36-15- 7 ——, C. L. Freeland 1.
Bigpond, Devonian Oil & Independent O. & G. 2.
29-14- 8 Mitchell, Pure Oil 3.
7-19- 9 Tahkaney, Dixie Oil Co. 1.
23-18-10 Bozy, H. C. Wilson 1.
1-18-11 McGuire, Gypsy Oil 23.
10-18-11 Traser, Plymouth Pet. 1.
13-18-11 Barnett, Regal Oil 16.
6-18-12 Townlot, Kolb et al 1.
Townlot, J. H. Rebold 1.
Townlot, Sunray Oil et al 1.
Townlot, K. C. Wheeler 17.
13-17- 9 Carter, Abbot & Dillard 1.
1-17-10 Unallotted, Henry Oil et al 1.
5-17-10 Francis, Dixie Oil 4.
11-17-10 Wrightsman, Whitten & Wilcox 3.
12-17-10 Harris, Carter Oil 1.
Turner, Thompson & Black 1.
13-17-10 Tiger, Cumberland Pet. 3, 4.
24-17-10 Dawson, J. H. Wright 10.
30-17-10 Sneed, Independent O. & G. 2.
35-17-10 Buckrot, Hiram O. & G. 5.
18-17-11 Meyers, Cumberland Pet. 3.
21-17-11 Hendrickson, Packson & Wise 3.
26-16-10 Eprill, Curtis Oil & O. Howard 1.
31-15- 9 Creek, The Texas Company 1.
F. Lucas, C. G. Tibbens 4.
9-14-10 Unallotted, C. G. Tibbens 1.
16-14-10 Bear, Atlantic O. P. et al 5.
20-14-10 Scott, Donnelly et al 3.
32-14-10 Walder, Mid-Cont. Pet. 8.
11-18- 7 Millie, Prairie O. & G. 2.
10-15- 8 Lewis, F. R. Billingslea et al 1.

**Wells Drilling**

6-18- 7 Rector, The Prairie O. & G. 41.
5-18- 7 Rector, The Prairie O. & G. 40.
17-17- 8 Bruner, The Prairie O. & G. 1.
1-19- 8 Ashbury, J. B. Grieves 1-A.
8-18- 7 Vance, Magnolia Pet. 21.
Yarhola, Riverside Oil 2.
Starr, Silurian Oil 12.
16-18- 7 Coker, Magnolia Pet. 1.
26-18- 7 Jones, Shaffer O. & R. 2.
15-17- 7 Stewart, Mid-Cont. Pet. 28.
17-17- 7 Tiger, Shaffer O. & R. 15.
4-17- 8 Lesley, McCulloch et al 1.
16-17- 8 Scruggs, Burk-Greis Oil 1.
16-17- 8 Gooden, Love & Wolfe 1.
Morrison, Shaffer O. & R. 3.
Scruggs, Transcontinental Oil 1.
17-17- 8 Bruner, Shaffer O. & R. 3.
36-17- 8 Farres, Murray Oil 1.
22-16- 8 Arsoyalee, Peters Pet. 3.
25-15- 7 Charles, Phillips Pet. 3.
36-15- 7 Tiger, R. J. Jennings 2.
25-15- 8 Herrod, C. G. Tibbens 4.
27-15- 8 Grayson, Independent O. & G. Tibbens 1.
30-15- 8 Lindsey, Empire G. & F. 3.
17-14- 8 Cooper, Shaffer O. & R. 1.
23-14- 8 Hemmett, C. G. Tibbens 1.
24-14- 8 Bear, C. G. Tibbens 1.
30-14- 8 Fixico, Gypsy Oil 1.
McGelbra, Olean Pet. 3.
2-19- 9 Unallotted, Sherry et al 1.
18-19- 9 Sewell, Roxana Pet. 2.
31-19- 9 Gooden, C. L. McMahon 1.
34-19- 9 Deerisaw, Smith & Mann 1.
4-18-10 Graham, Dixie Oil & Holmes 1.
Brown, Bu-Vi-Bar Pet. & Gypsy Oil 1.
6-18-10 Bell, G. M. et al 1.
7-18-10 ——, G. M. Oil 1.
9-18-10 Jackson, Bu-Vi-Bar Pet. 1.
35-18-10 Thompson, Radcliff et al 1.
1-18-11 Land, The Texas Company 14.
22-18-11 Bruner, Sheridan Oil 1-A.
32-18-11 Strip, Drew O. & G. 1.
33-18-11 Sapulpa, Thompson, Black & Roxana Pet. 1-A.
5-18-12 Sizemore, Williams & Wood 1-A.
6-18-12 Townlot, Savoy Oil et al 1, 1, 1.
Townlot, Sunray Oil et al 1, 1, 1, 1.
10-17- 9 Lindsey, Wilcox O. & G. 4.
2-17-10 Self, Iron Mtn. Oil 1-A.
Johnson, T. C. M. Oil 1.
Johnson, The Texas Co. 1.
8-17-10 Pemberton, Nowata & Independent O. & G. 3.
Pemberton, T. S. Turman 2.
9-17-10 Charcotentana, Continental Oil 1.
Charcotentana, Transcontinental Oil 1.
11-17-10 Unallotted, O. M. Ireland 2.
12-17-10 Turner, W. H. Elson 1.
13-17-10 Strip, J. R. Cole Jr. 2.
Joconton, McCulloch 2.
24-17-10 C. Tahkaney, J. H. Wright 13.
Bucktrot, Pioneer Pet. 13.
15-17-10 Berryhill, O. M. Irelan 1.
28-17-10 Tiger, H. C. Wilson 1.
32-17-10 Yellowhead, Skelly Oil 3.
4-17-11 Barnes, Rivers Pet. 2.
11-17-11 Davis, Kurell O. & G. 7.
16-17-11 Broadnox, Misener & Reesman 4.
Wilson, Thompson & Black 1.
Broadnox, Thompson & Black 1.
17-17-11 Black, Misener et al 1-A.
18-17-11 Sparks, J. R. Cole 2.
Berryhill, Cumberland Pet. 1.
19-17-11 Lewis, Pioneer Pet. 1.
21-16- 9 Hendrickson, Love & Myers 2.
36-16- 9 Allen, Williams & Bell 1.
7-16-12 Bowman, Sherry et al 1.
13-16-12 Unallotted, Winemiller et al 1.
20-15- 9 Montgomery, C. G. Tibbens 1.
30-15- 9 Unallotted, C. G. Tibbens 36.
Fields, C. G. Tibbens 4.
31-15- 9 Friday, Mid-Cont. Pet. 1.
R. Lucas, C. G. Tibbens 5.
9-15-10 Hohomer, Carter Oil 4.
7-14- 9 Sneed, The Texas Co. 1.
19-14- 9 Allcorn, Atlantic O. P. & Phillips Pet. 1.
1-14-10 Withers, Gray Oil 1.
2-14-10 Milliken, Devonian Oil 1.
4-14-10 Jones, Mid-Cont. Pet. et al 1.
10-14-10 Kimball & Reading, Atlantic & Phillips 1.
16-14-10 Bear, Atlantic O. P. et al 4.
18-14-10 Wolfe, Independent O. & G. 1.
32-14-10 Fee, Henry & Murphy 2.
S. Doyle, T. B. Slick & The Prairie 2.
35-14-10 Ricks, Bassett et al 1.

**Shut Down**

5-18- 7 Riverbed, Riverside Oil 3.
30-18- 8 Holman, J. O. Walters et al 1.
20-17- 8 ——, Transcontinental Oil 2.
22-16- 8 Peters, T. C. M. Oil 1.
17-19- 9 Murrell, Redister Oil 4.
27-18-10 Allen, Vaughn & Wheeler 6.
14-18-11 Tiger, O. N. White 1-A.
32-18-11 Drews, Gross et al 1.
9-18-12 White, Tibbons 9.
3-17- 9 Simmons, The Texas Company 7.
13-17-10 Fulson, Pontiac Oil 2.
20-15- 9 Fobes, C. G. Tibbens 1.
30-15- 9 Unallotted, C. G. Tibbens 35.
20-14-10 Elrod, Quinland & Henry 3.
22-17- 9 Harjoche, T. P. C. & O. Co. 2.

Rigs, 36; wells drilling, 113; total 152.

**GARFIELD COUNTY**

**Rigs**

24-24-3w Disney, Failing & Lawson 1.
13-22-4w Walker (N), Sinclair Oil 72.
24-22-4w Boggs, Champlin Refg. 35.

**Wells Drilling**

9-24-6w White, Pulse & Beamer 1.
14-24-3w Garsarch, Sagar Oil 1.
29-23-4w Brunker, Roxana Pet. 1.
13-22-4w Walker (N), Sinclair Oil 29-A, 68, 71, 73.
Denker, Sinclair Oil 29.
14-22-4w Dively, Sinclair Oil 5.
Walker (S), Sinclair Oil 28.
25-22-4w Hoy, Sinclair Oil 22.
18-22-3w Schroeder, Roxana Pet. 11, 29.
Hartley, Sinclair Oil 37, 54.
19-22-3w Kisner (W), Sinclair Oil 39.
Windler, Sinclair Oil 11, 16.
2-21-7w Montgomery, Frank Frantz 1.
12-21-4w Schriven, Beopple et al 1.
2-20-5w Fee, Sinclair Oil 2.
9-20-4w Looman, Marland Oil 1.

**Shut Down**

3-22-5w Swinery, Ashby & Barr 1.
18-22-3w Schroeder, Roxana Pet. 13.
19-22-3w Kisner (N), Sinclair Oil 15.
31-21-5w Vanderwork, A. E. Summers 1.
5-21-5w Fain, Penders Oil 2.
9-21-3w Bowers, Penders Pet. 1.
7-20-6w Semrad, O. O. Owens 1.
12-20-4w Miller, Marland Oil 1.

Rigs, 3; wells drilling, 30; total 33.

**GRADY COUNTY**

**Rigs**

22- 5-8w Charles, Sinclair Oil 5.
23- 5-8w Farwell, Meridian Gas Co. 3.
Edmundson, Skelly Oil 5.
34- 5-8w Scott, Grogan et al 1.
7- 5-7w Drake, Nicholos & Page 1.
11- 4-8w Williams, J. B. Nicholos 1-A.
14- 4-8w Pendley, Magnolia Pet. 3.
26- 4-6w Pursley, Henry & Sinclair Oil 1.
6- 3-5w Sledge, Briscoe & Hall 1.
8- 3-5w Horton, Carter Oil 4.
Horseman, Carter Oil 1.
16- 3-5w Dolen, Carter Oil 2.
Hicks, Amerada & W. H. Gant 2, 3.
27- 3-5w Polson, Gant et al 2.
22- 3-5w Pooler "B," The Prairie O. & G. 1.
28- 3-5w Harrison, Magnolia Pet. 5.

**Wells Drilling**

13- 7-5w Kemp, Bedman et al 1.
23- 5-8w Sanford, Oklahoma Natl. Gas 3.
24- 5-8w Farwell Smith, Little Nick Oil 1.
25- 5-8w Serrato, Nicholos Drlg. Co. 1-A.
26- 5-8w Farwell, Little Nick Oil 3.
Smith, Oklahoma Natl. Gas 3.
27- 5-8w Glover, Oklahoma Crude Oil Co. 3.
19- 5-7w Thomas, Empire G. & F. Co. 1.
3- 4-8w Gardner, Berry et al 1-A.
10- 4-8w Ramsey, Meridian Gas Co. 1.
11- 4-8w Rochold, Magnolia Pet. 2-B.
Williams, Meridian Gas Co. 2.
Pettitt, Watchorn O. & G. 3.
35- 4-8w Ridgeway, J. B. Nicholos 1.
21- 4-6w Tucker, Carter Oil & Frates & Nash 1.
31- 4-5w Anderson, Magnolia Pet. 1.
8- 3-5w Horton, Carter Oil 3.
Horton, Carter Oil 1, 2.
9 -3-5w Popp, Marland Oil 1.
16- 3-5w Dolen, Carter Oil 1.
Walford, Carter Oil 2, 3, 4, 5.
Stacy, Garvin Drlg. Co. 2.
Kayser, Gypsy Oil 2.
Burke, Marland Oil 3.
Nothoff, Twin State Oil 1.
17- 3-5w Horton, Carter Oil 2.
Woods, Carter Oil 2.
Woods, Marland & Joe Ray 2.
Woods, Magnolia Pet. 1.
20- 3-5w Hogue, Gypsy Oil 1.
21- 3-5w Thelma Ball, Carter Oil 1.
Costello, Carter Oil 1.
Hogue, Carter Oil 1.
Kerans, Carter Oil 1.
Carter-Kerans, Carter Oil 2.
Miles-Kerans, Carter Oil 2.
Spaulding, Carter Oil 1.
White, Carter Oil 1.
Russell, Magnolia Pet. 1.
22- 3-5w Miller, Carter Oil 2.
Miller, Magnolia Pet. 1.
27- 3-5w Pounds, Amerada Pet. 1.
Adair, Carter Oil 2, 3.
White Eagle Polson, Carter Oil 3, 5, 6.
Kilgore, Clark & Cowden 4, 5.
East Kilgore, Clark & Cowden 1.
Adair, Critchlow et al 3, 4.
Ervin Polson, Magnolia Pet. 2.
28- 3-5w Slusher, Carter Oil 1.
Miller, Magnolia Pet. 2.
34- 3-5w Wham, Carter Oil 4, 5, 6, 7.
Eva Nation, Carter Oil 2, 3.
Mitchell, Magnolia Pet. 2.
Mitchell, Magnolia Pet. 2, (Betty)
34- 3-5w Wham, Magnolia Pet. 1.
35- 3-5w Cochran, Carter Oil 1.
Lindsey, Carter Oil 4.
Abernathy, Carter Oil 4.
Hildebrant, Carter Oil 2.
21- 3-5w Russell, The Prairie O. & G. 2.

**Shut Down**

35- 5-8w Smith, Magnolia Pet. 1.
Dryden, J. B. Nicholos Oil 1.
6- 3-5w Sledge, Frates et al 1.
16- 3-5w Gardnhire, Carter Oil 1.
Smith, Hamon & Cox 2.
25- 3-5w Graham, Magnolia Pet. 1.
28- 3-5w Wilde, Joe Anderson 1-A.
Harrison, Magnolia Pet. 4.
Cassie Kerans, Magnolia Pet. 1.
34- 3-5w Mitchell, R. R. McBride 1.

Rigs, 17; wells drilling, 83; total 100.

**GRANT COUNTY**

**Rigs**

24-27-3w Birdston, Burns & Beasley 1.

**Wells Drilling**

22-29-3w White, Amerada Pet. 1.
6-28-3w Snyder, Otstot Dev. Co. 1.
28-27-6w Bradley, Miller Bros. et al 1.
18-27-5w Custard, J. W. Bailey et al 1.
22-27-3w Lane, Blackwell O. & G. 4.
22-25-4w Vallner, Cowden 2.

**Shut Down**

23-27-3w Flood, Larutan Fuel Co. 1.
34-26-4w Royce, Brazill & Moses 1.
16-26-3w Sherrer, Flannigan & Dedman 1.

Rigs, 1; wells drilling, 9; total 10.

**HUGHES COUNTY**

**Rigs**

4- 9- 9 Ogle, Transcontinental Oil 9.
6- 9-10 Hully, Amerada Pet. 2.
14- 8- 9 Long, Independent O. & G. 2.
15- 8- 9 Washington, Phillips Pet. 1.
14- 7- 8 Jacobs, W. R. Ramsey 3.
1- 8- 8 McAllister "A", The Prairie O. & G. 1.
26- 9- 9 Kennedy, The Prairie O. & G. 2.

**Wells Drilling**

4- 7- 8 Long, Producers & Refiners Corp. 4.
11- 7- 8 Shawnego, Producers & Refiners Corp. 1.
1- 8- 8 McAllister, The Prairie O. & G. 1.
26- 9- 9 Kennedy, The Prairie O. & G. 1.
1- 9- 9 Bruner, Independent O. & G. & Atlantic O. P. 4.
Cain, Minnehoma Oil 6.
25- 9- 9 Pigeon, Winona Oil 1.
19- 9- 9 Charles, Atkins 1.
26- 9- 9 Harjo, Transcontinental Oil & Independent O. & G. 11, 12.
30- 9- 9 Anderson, T. B. Slick 1.
35- 9- 9 Powell "B", Roxana Pet. 1.
21- 9-10 Buck, Furman & Newman 1.
11- 8- 9 Long, Carter Oil 1.
Long, Mid-Continent Pet. 1.
13- 8- 9 Long, Noble O. & G. 1.
17- 8-10 Cornelius, Dixie Oil 1.
21- 8-10 Hamphill, Burk Greis Oil 1.
29- 7- 8 Harjo, Magnolia Pet. 1.

**Shut Down**

35- 9- 9 Powell, Roxana Pet. 2.
3- 8- 9 Harjo, Champlin & Bass 1.
18- 8-10 Diamond "B," Dixie Oil 1.
Diamond "A," Dixie Oil 2.
Diamond "C," Dixie Oil 3.
19- 9-10 Alexander, Carter Oil 5.
32- 8-11 Turner, Googan et al 1.

Rigs, 7; wells drilling, 26; total 33.

**KAY COUNTY**

**Rigs**

21-29-1w Buell, Comar Oil 7-W, 12-W.
Duncan, Comar Oil 1-W.
McCormick, Comar Oil 5-W.
Priboth, Comar Oil 10-W.
17-29-1e Nixon, Carter Oil & Ona Oil 2, 3.
5-28-1w McCulloch, Comar Oil 1½.
30-27-2e Van Winkle, Marland Oil 1.
6-26-1w Glasgow, Barnsdall Oil 1.
9-25-2w Miller, Marland Oil 1.

**Wells Drilling**

16-29-1w Brown, Comar Oil 4-w.
School land, Mid-Cont. Pet. 5, 6.
17-29-1w Moore, Twin State Oil 2.
20-29-1w Day, Comar Oil 3-W, 4-W.
20-29-1w Day, The Texas Co. 5, 6.
21-29-1w Duncan, Comar Oil 15.
Priboth, Comar Oil 1-W, 8-W, 13-W, 14-W.
29-29-1w Judd, Comar Oil 1-B.
17-29-1e Nixon, Carter Oil & Ona Oil 1.
Shimp, Carter Oil & Ona Oil 3, 4.
E. Dickerson, Marland Oil 4, 5, 6.
White, Marland Oil 2.
Brockhouser, Vernon O. & G. 2.
30-29-1e Hennessey, National Union Oil 3.
4-28-1w Dowd, Comar Oil 1.
8-28-1w Horne, Comar Oil 2-W.
6-28-1e Wolfe, McComas et al 1.
11-28-1e Lowry, Oklahoma Northern O. & G. 1.
28-28-2e Huddleston, John Stark et al 1.
3-27-1w Moore, Arkansas Fuel Oil Co. 2, 3.
4-27-1w Moore, Schouwald et al 1, 2.
8-27-1w Jameson, Harris & Hahn 4.
Mitmore, Otstot et al 1.
17-27-1w Jameson, The Carter Oil Co. 1.
18-27-1w Gaylor, Marland Oil 1.
Hall, Sinclair Oil 1.
20-27-1e Buessing, Hag Oil Co. 1.
3-27-2e Balzer, Mississippi Oil Co. 2.
31-27-2e Ferguson, Anderson Peterson 1.
1-27-3e Robinson, Geo. Miller Oil 1.
1-26-2w Fitzgerald, Marland Oil 1-B, 2-B, 3-A, 4-A.
Hockstetter, Marland Oil 3-B.
Higgins, Marland Oil 1.
12-26-2w Diller, Marland Oil 1.
North, Marland Oil 5-A, 10, 11.
6-26-1w Glasgow, National Union Oil & Marland Oil 2.
North No. 2, Marland Oil 2, 3, 4.
Currie, Marland Oil & Phillips Pet. 1.
7-26-1w Kaney, Blackwell O. & G. & Marland Oil 3.
Kaney, Marland Oil 1.
21-26-1e Keathley, A. D. Morton et al 1.
9-25-2w Chambers, Marland Oil 1.
4-25-2e Foureyes, Marland Oil 1-A.
1-26-2w Smith "A," The Prairie O. & G. 9, 10, 4.
Smith "B," The Prairie O. & G. 8, 9, 10, 11, 2.
19-27-1w Hargraves, The Prairie O. & G. 1.

**Shut Down**

21-29-1w Priboth, Comar Oil 2.
5-28-1w Townsite, Braman Oil 2.
McCulloch, Comar Oil 5.
12-26-2w North, Marland Oil 4.
32-26-2e McNeal, Ponca Lee Oil 1.
15-25-2w Thomas, Marland Oil 2.
15-25-1w McFarlands, Tonkawa Dev. Co. 1.
28-25-1w Becker, Skelly Oil 3.
Siler, The Texas Co. 4.

Rigs, 11; wells drilling, 79; total, 90.

**LINCOLN COUNTY**

**Rigs**

21-17- 4 Hays, W. J. Sherry & C. J. Wrightsman 1.
11-16- 5 Hemmer, Morgan & Flynn 1.

**Wells Drilling**

34-17- 2 Lukenbill, Wentz Oil 1.
29-17- 3 Gunn, Willis & G. 1.
31-17- 4 Scott, Roxana Pet. 1.
31-17- 5 Bett, T. P. C. & Co. 1.
30-17- 5 West, Carter Oil 1.
31-17- 5 Cook, Shaffer O. & R. 1.
6-16- 5 Lindsey, I. T. I. Oil 1.
14-15- 5 Clark, Magnolia Pet. 1.
16-15- 5 Camden, Wilcox O. & G. 1.
8-15- 6 Varner, Phillips Pet. 2.
27-15- 6 Foster, J. A. Hull Oil 1.
34-15- 6 Hemming, Amerada Pet., Madden & Madden 1.
7-14- 4 Benedict, Magnolia Pet. 1.
8-14- 4 Staubus, Magnolia Pet. 1.
9-14- 6 Teter, Mid-Cont. Pet. 1.
35-14- 6 Newkirk, Wilcox O. & G. 1.
16-13- 4 School land, Bu-Vi-Bar Pet. 1.
School land, Mid-Continent Pet. 1.

Rigs, 2; wells drilling, 18, total 20.

**LOGAN COUNTY**

**Rigs**

25-17-4w Pool, Ramsey Bros. 1.

**Wells Drilling**

30-19-4w McCulloch, Roxana Pet. 1.
33-19-4w ——, Bryan & Emery 1.
32-19-3w Rogers, Carter Oil 1.
9-18-4w Lovell, Brown & Blevens 1.
16-18-4w Gragg, Healdton O. & G. et al 1.
28-18-4w Moore, Franklin Oil Assn. 1.
5-17-1w Baker, Zingerle & Bailey 1.
28-17-1e Berry, T. B. Slick 1.

**Shut Down**

33-18-3w Quier, Haley, & Pioneer Pet. 1.
28-16-1w Lair, Blackford O. & G. 1.

Rigs, 1; wells drilling, 10; total, 11.

## MUSKOGEE & WAGONER COUNTIES

### Rigs

2-16-16 Smith, Mitchell Oil 4.
12-15-15 Austin, Link Oil et al 1.
14-15-16 Robbins, K. Wossof 1.
14-15-17 Bruner, E. H. Neal et al 1.
16-15-17 Robert, Denton & Marshall 1.
14-15-17 Robert, Sunray Oil 1.
Roberts, E. L. Newport et al 1.
17-15-17 Warner, I. L. Selby 1.
Dinwiddie, W. R. Sommerville 2.
Warrior, W. R. Sommerville 3.
6-14-18 Holden, Jolly Ogg Oil 4.

### Wells Drilling

25-19-15 McIntosh, J. F. Hoff 1-A.
15-17-16 Atkins, W. C. Newman 1.
14-16-16 Lunnon, M. E. Johnson 1.
16-16-17 Ballard, R. F. Ray et al 1.
7-15-17 Smith, R. Middleton 5.
15-15-16 Drew, H. W. Kiskaddon 1.
17-15-17 Monday, W. R. Sommerville 1.
Manuel, H. E. Williams 6.
26-15-17 Lewis, W. R. Sommerville 1.
20-15-18 Roberston, Whaley & Lang 2.
12-15-18 Meagher, Jolly Ogg Oil 5.
16-14-17 James, Peterson et al 6.
14-14-17 Smith, J. L. Slucher 1.
2-14-19 Thompson, C. M. Bradley 1.
5-14-19 Kelly, C. M. Bradley 1.
18-13-19 Smith, Howard & Murphy 1.

### Shut Down

8-18-18 Brown, F. E. Webb & Allison 1.
16-17-16 Bruner, M. E. Johnson 1.
29-15-15 Morris, E. Price 5.
26-15-15 Grayson, Vise & Heflin 3.
15-15-16 Harrison, J. O. Tilley 2.
8-15-17 Rector, C. M. Whaley et al 1.
12-15-18 Jobe, C. F. Finefield 1.
2-14-19 Wade, C. M. Bradley 1.
27-16-17 Lewis, H. H. Flesher 4.
Rigs, 11; wells drilling, 25; total, 36.

## OSAGE COUNTY

### Rigs

16-28- 8 J. J. Fitzstevens 1.
7-27- 6 Phillips Pet. 10, 11, Phillips Pet. 2, 6.
32-27- 6 Carter Oil 4.
34-27- 6 Kewanee O. & G. 6, 7, 8, 9, Kewanee O. & G. 5, Kewanee O. & G. 4, 6.
23-27-11 Delmar Oil 2.
12-26- 4 Skelly Oil 1.
20-26- 6 Phillips Pet. 10.
21-25- 8 Sinclair Oil 3.
19-25- 8 W. G. Oliphant 6.
30-25- 8 The Texas Company 12.
3-25 9 Garnett Oil Co. 1.
20-24- 9 Tidal Oil 5.
9-24-12 59-Osage Oil 27.
1-23- 8 Tidal Osage Oil 6.
29-23- 8 I. T. I. Oil 359.
34-23- 9 M. & T. Oil 3.
17-23-10 Delmar Oil 3.
14-21- 8 Pueblo Pet. 2.
14-21-10 Oklahoma Natural Gas 764.
Lillystrand et al 4.
46-20-10 Sand Springs Home 102.
5-20-11 Pioneer Pet. 8.
22-20-11 Sand Springs Home 1.

### Wells Drilling

36-24-12 The Prairie O. & G. 42.
21-25- 8 The Prairie O. & G. 5.
1-27- 5 Phillips Pet. 6.
12-27- 5 Phillips Pet. 9.
27-27- 5 Mid-Kansas Oil 1.
7-27- 6 Gypsy Oil 3, Phillips Pet. 8, Phillips Pet. 5, 8.
20-27- 6 Peters et al 2.
28-27- 6 Gypsy Oil 2, 3.
33-27- 6 Carter Oil 3.
34-27- 6 Kewanee O. & G. 4, 5, Kewanee O. & G. 2, 5.
5-27-11 Blackwell O. & G. 1-A.
30-27-12 Knupp Oil 1.
20-26- 6 Phillips Pet. 7, 8.
21-26- 6 Phillips Pet. 5.
28-26- 6 Skelly Oil 8, 9, 10, 11, 12, The Texas Company 5, 6, 7, 8
5-26- 7 Galt Brown 1.
29-26- 7 Wrightsman 1.
3-25- 5 Barnsdall Oil 1.
27-25- 8 I. T. I. Oil 358.
29-25- 8 The Texas Company 4.
30-25- 8 The Texas Company 10.
26-25- 9 C. B. Peters 1.
27-25- 9 Marland Oil 1, 2.
31-25- 9 I. T. I. Oil 354.
34-25- 9 Marland Oil 2.
16-24- 4 Barnsdall Oil 1.
15-24- 8 I. T. I. Oil 357.
29-24-11 I. T. I. Oil 350.
20-23- 8 I. T. I. Oil 355.
16-23-10 Mid-Continent Pet. 2.
17-23-10 Delmar Oil 2, New England O. & P. L. Co. 2.
20-23-10 Delmar Oil 1-A.
3-22- 9 Edgington & Mullendore 7.
23-22-10 Ray Branstetter 2.
31-22-10 Peters Pet. 1.
34-22-10 Tidal Osage Oil 22.
5-22-12 T. K. Smith 2.
7-21- 9 Osage Oil Syndicate 9.
24-21- 9 Sand Springs Home 101.
10-21-10 Mid-Kansas Oil 3.
21-21-12 Commercial Drig. Co. 1.
32-20-10 Gled Oil et al 1.

### Shut Down

30-25- 8 The Texas Company 11.
20-23-10 Superior Oil 3.
7-21-11 Skelly Oil 4.
Rigs, 31; wells drilling, 63; total, 94.

## OKFUSKEE COUNTY

### Rigs

16-12-11 Hooks, The Prairie O. & G. 1.
2-12-11 Sullivan, J. Deaner 1.
32-12-11 McCoy, Josey Oil 13, 16, 20, 21.
35-11- 9 Wind, Gilcrease Oil 2.
14-11-10 Scott, Amerada Pet. 1.
14-11-11 Taylor, Independent O. & G. 1.
25-11-11 Unallotted, Carter Oil 2.
Lukesky, J. Deaner 2.
35-11-11 Jackson, Atlantic O. P. et al 4.
1-10- 9 Deer, Burk-Greis Oil 1.
2-10- 9 Tecumseh, Mid-Cont. Pet. et al 1.

### Wells Drilling

7-13- 7 Wilson, Roxana Pet. 1.
13-12- 6 Strip, Mid-Continent Pet. 1.
7-13-10 Mercer, L. E. Cooper & R. D. Donnelly 1.
16-13-10 Manwarring, Darby Pet. & Atlantic O. P. 1.
25-12-10 Harjo, Reams et al 1.
29-12-10 Hall, C. L. McMahon et al 1.
22-12-11 Holmes, Hartman et al 1.
32-12-11 Hulsey, Josey Oil 5.
33-12-11 McCoy, Josey Oil 10, 12, 15, 18, 19, Fields, Josey Oil 3.
36-11- 9 Micco, Sinclair Oil 1.
14-11-10 Brooks, Terrian et al 1.
14-11-11 Ingram, Champlin O. & R. 2, Jefferson, Champlin O. & R. 1.
15-11-11 Jacobs, Champlin O. & R. 6.
19-11-11 Barnett, Riverland Oil 2.
23-11-11 Grayson, A. D. Morton 1, Jefferson, Champlin O. & R. 2.
25-11-11 Barnett, Carter Oil 15.
36-11-11 Detzler, W. L. Umburn 1-A.
4-10- 9 Tiger, Gibson & Zahniser 1.
6-10- 9 Brown, McCulloch Oil 1.
16-10- 9 Bruner, Independent O. & G. 1.
17-10- 9 Caroline, McCulloch Oil 1.
4-10-11 Barnett, Kingwood Oil 1.
19-10-11 Lockard, Magna, Flynn & Roxana 2.
15-11-11 Washington, Champlin O. & R. 3.

### Shut Down

8-12-10 Yarhola, Blakely et al 1.
33-12-11 Fields, Josey Oil 2.
4-11-10 Stidham, Moose & Daniels 1.
14-11-11 Fixico, Pure Oil 1.
22-11-11 Holmes, Champlin O. & R. 2, 5.
30-11-11 Holmes, Riverland Oil 1.
11-10-11 Hill, Lou Umburn 1.
Rigs, 14; wells drilling, 39; total, 53.

## OKMULGEE COUNTY

### Rigs

9-16-12 Penoko, Tom Turner et al 1.
30-16-14 Phillips, W. K. Hunt 2.
9-15-12 Bidhead, W. B. Pine 3.
15-15-12 Marsey, T. A. Johnson 1.
28-14-11 Coleman, Nowata O. & R. 1-A.
4-14-12 Burton, Phillips Pet. 1.
3-13-11 Anderson, R. C. Vincent et al 2.
15-13-12 Skelton, Shelton Oil 2.
4-11-12 Hawkins, Weir 4.
7-11-12 Strip, French & Garrett 1.
32-11-12 Ashbury, Colorado O. & G. 2.
3-15-14 Anderson, The Texas Company 1.
10-15-14 Carter, J. W. Roberts et al 2.
9-14-14 Reed, X-Ray Oil 1-A.
9-14-15 Sells, J. L. Powell 5.

### Wells Drilling

20-16-11 Pence, G. Simmons et al 2.
22-16-11 Escoe, Sinclair Oil 1.
34-16-11 Lowe, Iron Mtn. Oil 2.
28-16-12 Willis, Devonian Oil 1-A.
22-15-11 Lee, Le Bean et al 4.
9-15-12 Forty-Four, C. McMahon 3.
23-15-12 Peloche, Gray Oil et al 4.
24-15-12 Blair, Ted Savoie 3.
33-15-12 Harjo, Sheridan Oil 1-A.
4-14-11 Lunsford, Sidwell Drlg. Co. 2.
4-14-12 Burton, W. B. Pine 1.
18-14-12 Holsell, White Eagle O. & R. 1.
25-13-11 Lewis, J. A. Swindler 11.
27-13-11 Jones, H. H. Diamond 3.
29-13-11 Milroy, Wigton, Long & Mid-Continent Pet. 3.
32-13-11 Thomas, Denver P. & R. 1-A.
35-13-11 Love, Keaton & Gold 1.
4-15-14 Hawkins, W. B. Pine & The Prairie O. & G. 2.
16-15-14 Alexander, McCulloch Oil 6.
31-15-14 Carles, McCulloch Oil & Unger Bros. 7.
14-14-13 Blue, Gardner & Pine 1.
20-14-13 Lewis, E. L. King & Kyle 1.
9-14-14 Stevens, W. A. George 12, Crume, X-Ray Oil 1-A, Phillips, X-Ray Oil 1.
26-14-14 Flint, W. A. McCullough 5.
17-14-15 Thompson, Link Oil 2.
11-13-13 Gaither, Carey Jennings 4.
15-13-14 Reynolds, G. E. Semons & Roxana Pet. 10.
17-12-13 Grayson, W. B. Pine 3.
4-11-13 Starr, W. B. Pine 1.
13-11-13 Fisher, B. Morgan 1.

### Shut Down

20-16-12 Fee, Crider 1.
20-16-14 Mayfield, X. K. Stout 4.
23-16-14 Rowe, Atlas Oil 3.
33-15-12 Jackson, L. C. Wheeler et al 2.
25-14-11 Huckaby, Tiger Mtn. Oil 12.
28-13-11 Roberts, J. H. Rebold 2.
34-13-11 Porter, Lake Side Oil 1.
31-12-12 Jordan, Hampton & Wylee 1-A.
16-15-14 Bruner, The Texas Company 14.
27-14-14 Flint, J. C. Lampert 4.
18-14-15 Rentie, A. F. Bone 4, Rentie, Gallagher 3.
20-12-13 Johnson, G. F. Hahn 1.
Rigs, 15; wells drilling, 45; total, 60

## PAWNEE COUNTY

### Rigs

9-22- 6 Moore, Garber & Pulse 1.
25-21- 6 Henry, Bryan & Emery 1.
32-20- 5 Makin, Continental Oil 2.
32-20- 6 H. Vogler, Magnolia Pet. 5.
17-20-10 LeMaster, Sherdian Oil 1.

### Wells Drilling

9-22- 3 Arkeketa, Watchorn O. & G. 1.
10-22- 3 Tucker, Magnolia Pet. 1.
33-24- 5 Hines, Mid-Kansas Oil 1.
27-23- 4 Brain, J. Donahoe et al 1-A.
10-22- 4 Wineare, Magnolia Pet. 1.
26-22- 5 Reed, Bu-Vi-Bar Pet. 1.
16-21- 6 School land, 101 Ranch Oil 1.
21-21- 6 Bow, Gypsy Oil 1.
5-21- 7 Beams, Arkansas Fuel 1.
16-21- 7 School land, Barnsdall Oil 1, School land, Ed Rees et al 1-A
23-21- 7 Bailey, J. H. Markham 6.
36-20- 4 School land, I. T. I. Oil 1.
6-20- 5 Babcock, Stacey & Vaughn 1.
20-20- 5 Goodchief, Champlin Ref. Co. 1.
32-20- 5 Berry, Magnolia Pet. 3.
33-20- 5 Miner, Marland & Mid-Cont. Pet. 2.
9-20- 6 Duff, Magnolia Pet. 1, S. M. Fugate, Magnolia Pet. 1, Redding, Magnolia Pet. 1.
10-20- 6 Kline, Magnolia Pet. 1.
11-20- 6 Duff, Magnolia Pet. 1.
21-20- 6 Freeman, Josey Oil 6.
22-20- 6 Lesher, Fern O. & G. 4, Schoot, Josey Oil 3, Smith, Westerly Oil 3.
32-20- 6 Vogler, Magnolia Pet. 1, Sallee, Twin State Oil 1.
36-20- 6 Dodd, Davis & Tull 1.
20-20- 7 Loranz, Turner et al 1.
20-20-10 Tillock, Sheridan Oil 1.

### Shut Down

22-22- 7 Colbaugh, Victor Oil 1.
Rigs, 5; wells drilling, 32; total, 37.

## PAYNE COUNTY

### Rigs

14-19- 5 Norman, Twin State Oil 1.
5-19- 6 Ogradsby, Magnolia Pet. 1-A.
4-18- 5 Little Chief, Shaffer O. & R. 1.
36-18- 5 School land, Transcontinental Oil 1.

### Wells Drilling

12-19-1w Combs, Tidal Oil 1.
30-19- 2 Montgomery, Gardner Pet. 1.
8-19- 5 Walker, Magnolia Pet. 2, 3.
9-19- 5 Garr, Garr Oil 3.
21-19- 5 Moses, Olean Oil 1.
22-19- 5 Garr, Twin State Oil 2.
6-19- 6 Quay townsite, Noble O. & G. 11.
23-18-1e Hilber, Twin State Oil 1.
7-18- 4 Ramsey, Pure Oil 1.
31-18- 4 McFethers, Cushing G. & F. 1, Thomas, Magnolia Pet. 1, Parmele, Superior Oil 2.
32-18- 4 Ballard, Skelly Oil 3.
7-18- 5 Blue, Marland Oil 4.
9-18- 5 Harris, Shaffer O. & R. 1.
5-17- 4 Payne, Mulberry Oil 1, Sharrum, Shaffer O. & R. 6.

### Shut Down

21-19-1w Lewis, Ponca O. & G. 1.
13-19- 4 Stover, Roxana Pet. 1.
32-18- 3 Widows, Garber, Pulse & Gloyd 1.
Rigs, 4; wells drilling, 21; total, 25.

## PONTOTOC & GARVIN COUNTIES

### Rigs

33- 5- 5 Bennett, Shaw et al 1.
28- 5- 6 Stringer, American O. & R. 1.
17- 5- 8 Harjo, W. R. Ramsey 1.
9- 4- 5 Craig, W. R. Ramsey 1.
7- 3- 7 Walton, Ada Dev. Co. 1.
22- 1- 1 Russell, Day Oil 1.
31- 1-3w Banks, The Texas Company 1.
6- 3- 7 Lloyd, Ada Dev. Co. 7.

### Wells Drilling

31- 5- 5 Fee, La Salle et al 1.
14- 4- 7 Johnson, Henry et al 1.
23- 4- 7 Starritt, Lloyd et al 3.
12- 3- 1 Vaughn, Magnolia Pet. 1.
5- 3- 4 Coon, Carter Oil 1.
13- 1-3w Wyatt, Magnolia Pet. 7.
15- 1-3w Cowan, Magnolia Pet. 25, 26.
31- 1-3w Tossey, Magnolia Pet. 1.

### Shut Down

25- 5- 6 Patterson, Gillette & Krueger 1.
34- 5- 6 Wray, American O. & R. 1.
35- 4- 6 Rayborn, Bowles et al 1.
25- 3-1w Paxton, Guy Fisher et al 1.
28- 3- 4 Lloyd, C. F. Smith 1.
17-1 -3w Derdeyn, Pope & Wilson 2.
Rigs, 8; wells drilling, 15; total, 23.

## POTTAWATOMIE COUNTY

### Rigs

9- 9- 5 Gibson, Barnsdall Oil 1, Bryant, Magnolia Pet. 2, Gram, Phillips Pet. 6, Pool, Tidal Oil 1.
21- 9- 5 Day, Independent O. & G. & Devonian Oil 1.
32- 9- 5 Harbor, Independent O. & G. 1.
36- 7- 5 School land, Magnolia Pet. 1.
11- 7- 4 Billington, Magnolia Pet. 1.
14- 7- 4 Simpkins, Independent O. & G. & Darby Pet. 1, Banta, Magnolia Pet. 1.
15- 7- 4 Pillers, Independent O. & G. and Darby Pet. 1.
7- 7- 5 Bowers, Sinclair Oil 1.
19- 7- 5 Harper, Magnolia Pet. 1.
34- 8- 4 Brandenbury, Mid-Kansas Oil 1.

### Wells Drilling

22-11- 2 Hollis, Wilcox O. & G. 1.
26-11- 4 Kline, Sikes, Kilgore & Shaffer 1.
25-10- 4 Madgett, McCulloch Oil 1.
28-10- 4 Toney, Central Natl. Oil 1.
16-10- 5 School land, Clark Edwards et al 1.
4- 9- 5 Cowden, Amerada Pet. 1.
8- 9- 5 Dobbs, Philmack & Marland Oil 1, 2, Knappenburger, Indpendent O. & G. & Darby Pet. 1.
9- 9- 5 Bryant, J. E. Crosbie 1, McFarland, Gypsy Oil 1, 2, 3, Bryant, Magnolia Pet. 1, McKinley, Mid-Continent Pet. 1, 2, Gram, Phillips Pet. 1, 2, 3, 4, 5.
16- 9- 5 Bora, Gypsy Oil 1, 2, Earl, Gypsy Oil 1, 2, 3, 4, School land, Gypsy Oil 2, 3, 4, 5, Day, Pure Oil 1, 2.
17- 9- 5 Strain, Gypsy Oil 1, 2, Stebbing, Pure Oil 1, Strain, Roxana Pet. 1.
18- 9- 5 Foreman, Sinclair Oil 1.
16- 8- 5 School land, I. T. I. Oil 1.
22- 7- 3 Rickers, Roxana Pet. 1.
15- 7- 4 Standridge, Darby Pet. 1.
19- 7- 4 Talley, Pierce Oil 1.
30- 7- 4 Davis, Wrightsman Oil 1.
10- 6- 2 McCahey, Davis, & Detrick et al 1.

### Shut Down

12-10- 3 Ives, Sikes, Kilgore & Shaffer 1.
24- 8- 4 Leah, Amerada Pet. 1.
Rigs, 14; wells drilling, 46; total, 60.

## SEMINOLE COUNTY

### Rigs

33-11- 8 Williams, Barnsdall and Mid-Continent Pet. 10, Thompson, Pure Oil 2.
33-10- 6 Epperson, F. J. Searight 5.
5-10- 8 Roberts, Sinclair Oil 1.
3- 9- 5 Edmondson, Empire G. & F. 1.
10- 9- 5 Peters, Barnsdall Oil 2, 3, Wilmont, The Texas Co. 3.
11- 9- 5 Carter, Gypsy Oil 2, Sparks, Magnolia Pet. 5.
14- 9- 5 Dunaway, Phillips Pet. Co. 1.
15- 9- 5 Anderson, McGraw & Baoghman 3.
4- 9- 6 Cluck, Wilcox O. & G. 4.
14- 9- 6 Henry, Barnsdall Oil 1, Mayhue, The Texas Company 3.
22- 9- 6 Harbor, Roxana Pet. 2.
24- 9- 6 James, Amerada Pet. 2, James, I. T. I. Oil 7-A, Carter, Tidal Oil Co. 7.
25- 9- 6 Harjo, Gypsy Oil 3, Harjo, Independent O. & G. 1, 2, 3, Franks, Magnolia Pet. 4, Harjo, Tidal Oil 1.
26- 9- 6 D. Fixico, Tidal Oil 8.
27- 9- 6 Strothers, Phillips Pet. 3, 4
34- 9- 6 Cudjo, Gypsy Oil 2, 3, L. Jones, Turman Oil 4.
35- 9- 6 Cudjo, Atlantic O. P. Co. 4, Simpson, Carter Oil 2, Butler, McCullouch Oil 3, Born, T. B. Slick 2, R. Cudjo, T. B. Slick 3, Giblet, T. B. Slick 3.
36- 9- 6 Strothers "B," Pure Oil Co. 2.
18- 9- 7 Drewery, McCullouch Oil 1.
21- 9- 7 Roger, Gypsy Oil 1.
7- 9- 8 Alexander, Independent O. & G. 2, Cobb & Hill, Independent O. & G. 4, McDaniel, Independent O. & G. 3, W. Jefferson, Independent O. & G. 2, Butler, The Texas Company 1.
9- 8- 6 C. Jones, Sinclair Oil 1.
10- 8- 6 Taylor, Atlantic O. & P. 1, 2, 3, Taylor, Mid-Cont. Pet. 1, 2, 3, 4, Taylor, Sinclair Oil 1.
11- 8- 6 Murrow, Barnsdall Oil 1, 2, L. Jones, Sinclair Oil 1, Jones, Twin State Oil 1.
13- 8- 6 R. Grayson, Atlantic O. P. 1, Davis, L. T. I. Oil 4, Fay, I. T. I. Oil 2, Davis, Magnolia Pet. 1.
14- 8- 6 Harjoche, Carter Oil 2, Lacy, Empire G. & F. 4, 5, Reed, Pure Oil 3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, Lacey, Shaffer O. & R. 1, 2, 3, 4, Harjo, Sinclair Oil 4, Reed, The Texas Company 1, 2.
15- 8- 6 Bowlegs, Carter Oil 2, 3, Walker, Carter Oil 2, 3, Walker, Gypsy Oil 4, 9, Livingston, I. T. I. Oil 5, 7, 9, Goforth, I. T. I. Oil 1-A, 6, 7, Walker, I. T. I. Oil 4, 5, 6, Wilmut, I. T. I. Oil 1, Bowlegs, Minnehoma Oil 2.
16- 8- 6 Jones, Atlantic O. & P. 2, 3, 4, 5, 6, Fox, T. B. Slick 1.
21- 8- 6 McCelsey, Carter Oil 1, Coker, Independent O. & G. & Marland 1.
22- 8- 6 Bowlegs, I. T. I. Oil 1, 2, Walker, Sinclair Oil 1, 2.
23- 8- 6 Bowlegs, Atlantic O. P. 1, Hilly, Carter Oil 1, Wise, Carter Oil 3, 4, 5.
24- 8- 6 Barnett, I. T. I. Oil 1, 2.
22- 9- 6 Harjo, Kingwood Oil & Roxana Pet. 6.
13- 9- 6 Marcey, I. T. I. Oil 1.
24- 8- 6 Youngblood, I. T. I. Oil 2, 3.
28- 8- 6 Johnson, Independent O. & G. & Marland Oil 1.
19- 8- 7 Harjoche, Marland Oil 1.
27- 8- 8 Bora, Carter Oil 1.
30- 8- 8 M. Johnson, W. R. Ramsey 1.
32- 8- 8 Walker, Dixie Oil 4, Jones, Magnolia Pet. 6, Jones, Shaffer O. & R. 9, 10.
7- 7- 6 Palmer, Simons & Beam 1.
30- 7- 6 Palmer, Independent O. & G. 1.
28- 7- 7 Cudjo, T. B. Slick 1.
27- 9- 6 Strother, The Prairie O. & G. 6, 7.
23- 8- 6 Gahagan, The Prairie O. & G. 2.
10- 8- 6 Harber, The Prairie O. & G. 1, 2, 3.
22-10- 6 Weimer, The Prairie O. & G. 1.
36- 9- 6 Mason, The Prairie O. & G. 1.
23- 8- 6 Whitney, The Prairie O. & G. 1, 2.
34- 8- 6 Aldridge, The Prairie O. & G. 1.
17-10- 6 Bruner, The Prairie O. & G. 1.
30- 10- 6 Cash, The Prairie O. & G. Co. 1.

### Wells Drilling

33-11- 8 Williams, Barnsdall Oil & Mid-Continent Pet. 9, Thompson, McMann et al 1, Pierce, Continental Oil 12, 13, Thompson, Pure Oil 1-A, Pierce, Pure Oil 13.
26-10- 5 Turner, Sorry & Swartz 1.
26-10- 6 Scott, Carter Oil 1.
33-10- 6 Davis, Mid-Continent Pet. 1, Epperson, Searight et al 2, 3, 4, Youngblood, Searight et al 1-A, 2.
34-10- 6 Stewart, Carter Oil 5, Grayson, Mid-Cont. Pet. 4, 5, 6.
35-10- 6 Harjo, Wrightsman Oil Corp. 1.
12-10- 7 H. Micco, Gypsy & Prairie O. & G. 1.
34-10- 7 Tiger, Gypsy Oil 1.
32-10- 6 Kinkade, The Prairie O. & G. 7, 8, 10.
4-10- 8 Dunn, Central Nat'l. Oil Co. 4, Yarbough, Sinclair Oil 5, Jackson, The Texas Company 5.
9-10- 8 D. Hill, Sinclair Oil 2.
15-10- 8 Bruner, Wilcox O. & G. 9.
1- 9- 5 Ingram, Barnsdall Oil 1, Sango, Searight, F. J. 1.
10- 9- 5 Pack, Barnsdall Oil 1, Harjo, Barnsdall Oil 1, Peters, Gypsy Oil 1, 2, 3, Bruner, Independent O. & G. 3, Lena, Magnolia Pet. 2, 3, Wilmot, The Texas Company 2, 4.
11- 9- 5 Davis, Barnsdall Oil 1, 2, M. Davis, Barnsdall Oil 1, Bud Carter, Gypsy Oil Co. 1, Holmesley, Magnolia Pet. 1, Sparks, Magnolia Pet. 2, 3, 4.
12- 9- 5 Jamessay, Magnolia Pet. 1.
14- 9- 5 Winton, Barnsdall Oil 1.
15- 9- 5 F. Anderson, Amerada Pet. 1, 3, 4, 5, 8, D. Smith, Barnsdall Oil 1, 2, Sebolka, Barnsdall Oil 1, Talsey, Barnsdall Oil 1, D. Smith, Gypsy Oil 1, Anderson, McGray & Boughman 1, 2, Anderson, Roxana Pet. 1, Jones, Sinclair Oil 1.
2- 9- 6 Kiker, Carter Oil 1.
3- 9- 6 Frazier, Carter Oil 2, 3, 4, 5, Aldridge, Pure Oil 1, Strothers, Roxana Pet. 1, Polly, Sinclair Oil 1, 2.
4- 9- 6 Davis, Carter Oil 2, 3, 4, 5, 6, Lula, W. B. Pine 1, Jemina, Twin State Oil 1, Cluck, Wilcox O. & G. 1, 2, 3.
25- 9- 6 Gross, The Prairie O. & G. 4.
27- 9- 6 Strother, The Prairie O. & G. 2, 5.
10- 9- 6 J. Carter, The Prairie O. & G. 2, 3.
21- 8- 6 Harbison, The Prairie O. & G. 1.
33-10- 6 Cannon, The Prairie O. & G. 1, Houck, The Prairie O. & G. 1.
24- 9- 5 Baker, The Prairie O. & G. 1.
11- 9- 5 Stidham, The Prairie O. & G. 1.
32-10- 6 Dare, The Prairie O. & G. 1.
23- 8- 6 Gahagan, The Prairie O. & G. 1.
31- 8- 8 Amos, Producers & Refiners Corp. 11, 14, 13, Salinda, Producers & Refiners Corp. 2.
10- 9- 6 Evans, Pure Oil 1, Harbor, Roxana Pet. 1, 2, Noble, Superior Oil 1, 2.
13- 9- 6 F. Knapp, Carter Oil 3, 4.
14- 9- 6 F. Killing, Carter Oil 3, 4, 5, Rentie, Mid-Continent Pet. 3, 5, 7, 10, 12, Mayhue, The Texas Company 1, 2.
15- 9- 6 Johnson, Gypsy Oil 1, Noble, Tidal Oil 1.
20- 9- 6 M. Harjo, C. J. Wrightsman 1.
22- 9- 6 Harjo, Kingwood Oil & Roxana Pet. 1, 2, 3, 4, 5, Lasley, Roxana Pet. 1, 2, Harbor, Roxana Pet. 1, Grisso, Sinclair Oil 1.
23- 9- 6 Killingsworth "B," Amerada Pet. 2, F. Carter, Carter Oil 4, Grisso, Carter Oil 3, 5, 7, 8, Mary Killing, Carter Oil 2, 4, 5, 6, 7, 8, 9, Vierson, Carter Oil 1, 2, 3, 4, P. Fixico, Independent O. & G. 1, 3, 4, Goodin, I. T. I. Oil 2, 3, 4, Fixico, Transcontinental Oil & Sinclair Oil 3, 4, Harjo, Tidal Oil 3, 5, 8.
24- 9- 6 Carter, Barnsdall Oil 7, 8, James, I. T. I. Oil 1, 6, Tayoche, Mid-Continent Pet. 2, 6, 7, Mahardy, Tidal Oil 5, 6.

J. Carter, Tidal Oil 3, 5, 6.
25- 9- 6 Gross, Empire G. & F. 2, 1.
D. Harjo, Gypsy Oil 2.
Franks, Magnolia Pet. 2, 3.
Wilkins, Mid-Kansas Oil 1.
Tayoche, Tidal Oil 2.
26- 9- 6 Fixico, Gypsy Oil 3.
J. Wolfe, Gypsy Oil 5, 6.
Jones, Independent O. &. G. & Interocean Oil 4.
Bowlegs, I. T. I. Oil 6, 7, 8, 9, 10, 11, 12.
Strothers, Pure Oil 9, 12, 13, 14, 15, 16.
D. Fixico, Tidal Oil 2-A, 6-A.
27- 9- 6 Gilliland, Carter Oil 1.
Lukes, Carter Oil 3.
Strothers, Phillips Pet. 1, 2.
34- 9- 6 Jones, Barnsdall Oil 2, 3, 4.
W. Cudjo, Carter Oil 1.
Strothers, Carter Oil 2.
Wilson, Empire G. & F. 2, 3.
T. Cudjo, Gypsy Oil 1, 3.
L. Jones, Turman Oil 2, 3.
W. Jones, Turman Oil 1.
35- 9- 6 Cudjo, Atlantic O. P. Co. 2.
J. Cudjo, Atlantic & Independent O. & G. 2.
Cudjo, Carter Oil 3.
Simpson, Carter Oil 1.
Butler, Gypsy Oil 3.
Grisso, E. P. Harwell 1.
Butler, McCulloch Oil 2.
Cudjo "A," Sinclair Oil 6.
Cudjo "B," Sinclair Oil 3.
Cudjo, Superior Oil 3.
Born, T. B. Slick 1.
R. Cudjo, T. B. Slick 1, 2.
Franks, T. B. Slick 4, 6, 8.
Giblet, T. B. Slick 1.
Cudjo, Turman Oil 2, 4.
36- 9- 6 Frazee, Gypsy Oil 1.
36- 9- 6 Strothers "B," Pure Oil 1.
7- 9- 7 Kepeya, Barnsdall Oil 1.
8- 9- 7 Theloche, Sinclair Oil & Phillips Pet. 1.
16- 9- 7 Bull, Marland Oil & Mid-Continent Pet. 1.
17- 9- 7 Warrior, Sinclair Oil & Phillips Pet. 1.
19- 9- 7 Hagler, Shaffer O. & R. 1.
20- 9- 7 Pepper, Magnolia Pet. 1.
21- 9- 7 Island, Papoose Oil 1.
23- 9- 7 Stepney, Gypsy Oil 1.
28- 9- 7 Markwell, Magnolia Pet. 1.
Markwell, Pure Oil 1.
7- 9- 8 Alexander, Independent O. & G. 1.
T. Cobb, Independent O. & G. 1.
Lowery, Jarvis & Holm 1.
16- 9- 8 Drake, Plover Drlg. Co. 1.
18- 9- 8 Peters, Southwestern Pet. 5.
2- 8- 6 Payne, I. T. I. Oil 1.
3- 8- 6 Jacksey, Mid-Kansas Oil 1.
5- 8- 6 Seminole, Gypsy Oil 1.
9- 8- 6 Sally, Tidal Oil et al 1.
10- 8- 6 Harjoche, Tidal Oil et al 1.
13- 8- 6 Davis, I. T. I. Oil 2, 3.
Fay, I. T. I. Oil 1.
14- 8- 6 Lacey, Empire G. & F. 1, 2, 3.
Reed, Pure Oil 1, 2, 6.
S. Harjo, Sinclair Oil 1, 2, 3.
15- 8- 6 Rascoe, Amerada Pet. 1, 2, 3, 4, 5, 6, 7, 8.
Bowlegs, Carter Oil 1.
Walker, Carter Oil 1.
Walker, Gypsy Oil 2, 3, 5, 6, 7, 8.
Livingston, I. T. I. Oil 2, 3, 4, 6, 8.
Goforth, I. T. I. Oil 1, 2-A, 3, 4, 5.
Walker, I. T. I. Oil 1, 2, 3.
Bowlegs, Minnehoma Oil 1.
16- 8- 6 Jones, Atlantic O. P. Co. 1.
Jones, Marland Oil 1.
Taylor, Roxana et al 1, 2, 3.
Taylor, Roxana Pet. 4.
17- 8- 6 Strothers, Magnolia Pet. 1.
20- 8- 6 Rogers, Empire G. & F. 1.
22- 8- 6 Adam, Sinclair Oil 1.
Bowlegs, Sinclair Oil 1.
23- 8- 6 Wise, Carter Oil 1, 2.
24- 8- 6 I. T. I. Oil 1.
Work, Mid-Continent Pet. 1.
33- 8- 6 Brown, Gypsy Oil 1.
7- 8- 7 Sturgeon, Empire G. & F. 1.
14- 8- 7 Norvell, Magnolia Pet. 4.
26- 8- 7 R. Jackson, Magnolia Pet. 1.
15- 8- 8 Sewell, J. E. Crosbie et al 1.
22- 8- 8 Holwell, Magnolia Pet. 1.
29- 8- 8 Walker, Dixie Oil 3.
Walker, Independent O. & G. 3.
Joshua, Magnolia Pet. 2.
31- 8- 8 Casey, Carter Oil 9.
Sampson, Ramsey Bros. 1.
32- 8- 8 Long "M," Dixie Oil 2.
Long, Independent O. & G. & Atlantic O. P. 4.
E. Parker, Dixie Oil 3.
Long, Independent O. & Atlantic O. P. 4.
Bagwell, Magnolia Pet. 4.
Lena, Magnolia Pet. 5.
1- 7- 6 Dickson, I. T. I. Oil 1.
14- 7- 7 Jackson, Empire G. & F. 1.
22- 7- 7 Jackson, Magnolia Pet. 1.
Coppage, Magnolia Pet. 1, 2.
Coppage, Transcontinental Oil 5.
32- 7- 7 Marshall, I. T. I. Oil 1.
5- 6- 7 Vierson, Magnolia Pet. 1.
6- 6- 8 Reed, Hoofer Oil Co. 1.
24- 5- 5 Nitley, Riverside O. & R. & Kinney 1.

**Shut Down**

33-11- 8 Pierce, Continental Oil 1.
14-10- 5 Jarvis, McCulloch Oil 1.
33-10- 6 Epperson, F. J. Searight 8.
Youngblood, F. J. Searight 1.
34-10- 6 Stewart, Carter Oil 4.
2- 9- 5 Williams, Magnolia Pet. 1.
10- 9- 5 Peters, Barnsdall Oil 1.
Bruner, Independent O. & G. 4.
31- 9- 6 Cudjo, Barnsdall Oil 1.
34- 9- 6 Lincoln, Amerada Pet. 1.
15- 9- 7 Jonah, Pure Oil 1.
18- 9- 8 Smith, Winona Oil 2.
14- 8- 6 Harjoche, Carter Oil 1.
10- 8- 7 Davis, Carter Oil 1.
9- 7- 6 Litka, I. T. I. Oil Co.
22- 7- 6 Hotukla, Barnsdall Oil 1.
22- 7- 7 Coppage, Transcontinental Oil 4.
33- 6- 6 Charty, Palmetto Oil Co. 1.
33-10- 6 Kinkade, The Prairie O. & G. 9.
34-10- 6 Washburn, The Prairie O. & G. 2, 3.
33-10- 6 Houck, The Prairie O. & G. Co. 2.
Rigs, 147; wells, drilling, 358; total, 505.

## STEPHENS AND COTTON COUNTIES

**Rigs**

1- 1-9w Ball, Continental Dev. Co. 1.
32- 1-5w Charleston, Carter Oil 2.
27-1s-8w Taliaferro, Harry Hanbury 5.
28-1s-8w Taliaferro, McAlester et al 2.
34-1s-8w Kagay, Magnolia Pet. 17.
13-1s-4w Martin, Magnolia Pet. 1.
Underwood, F. W. Merrick et al 1.
Krebs, Skelly Oil 3.

**Wells Drilling**

2- 2-5w Gozo, Carter Oil 3.
Garvin-Simms, Carter Oil 8.
12- 1-6w Frensley, Hall et al 1-A.
25- 1-6w Barnes, Magnolia Pet. 1.
2- 1-5w Payne, Magnolia Pet. 1.
18- 1-5w Payne, Geo. Pace 1.
29- 1-5w Payne, Carter Oil 1.
31- 1-5w Payne, Magnolia Pet. 1.
Viola Payne, Magnolia Pet. 1.
32- 1-5w McRuer, Mid Center Dev. Co. 1.
18- 1-4w Chisholm, Magnolia Pet. 1-A.
32-1s-10w Fink, Garvin & Urice 1-A.
12-1s-9w Reeder, Margay Oil 2.
25-1s-9w Edmundson, Carter Oil 1.
D. Russell, Magnolia Pet. 12.
36-1s-9w School, W. H. Gant 5.
19-1s-8w Bridenthal, Ellis Drlg. Co. 7-B.
28-1s-8w Taliaferro, Ft. Ring & Sykes 3.
30-1s-8w Skelly-Grigham, Beard & Cobb 5.
Massey, Garvin Drlg. Co. 1.
Clarkson, Winkler & McQueen 1.
32-1s-8w Blaydes, Carter Oil 4.
34-1s-8w Simpson "B", Big Twelve Oil 1.
8-1s-5w Parker, Magnolia Pet. 1.
9-1s-5w Morris, Carter Oil 4.
2-1s-4w Goodwin, McBride et al 1.
12-1s-4w James, R. S. Scotts 1.
13-1s-4w Krebs, Skelly Oil 2.
24-1s-4w Stewart, Gilmer et al 1.
Franklin, Wirt Franklin 1-A.
5-2s-8w Pielsticker, Skelly Oil 2.
Miller, Empire G. & F. 1.
12-2s-8w Marrey, Pace et al 2.
29-2s-7w Wilson, Comanche O. & G. 1.
Johnson, Homaokla Oil 1.
3-2s-5w Webb, Magnolia Pet. 7.
3-3s-5w Sutherland, Fidelity O. & G. 1.

**Shut Down**

1- 2-5w Gozo, Magnolia Pet. 1.
14- 2-5w Truitt, Rogers et al 2.
28-1s-8w Nelson, V. A. Kidney 3.
34-1s-8w Burke, Davis Malernee 3.
22-2s-11w Koehler, J. W. Ray 1.
Rigs, 8; wells drilling, 42; total, 50.

## TULSA COUNTY

**Rigs**

6-19-10 McKee, Superior Oil 7.
10-19-10 White, E. A. Craig et al 1.
25-19-10 Star, W. E. Holmes et al 1.
18-17-13 Berryhill, Welch et al 1-A.

**Wells Drilling**

6-19-10 Futrell, J. Hayden 2.
7-19-10 Burnett, Superior Oil et al 7.
20-19-10 Chrisholm, Holmes et al 1.
22-19-10 Timothy, W. E. Holmes et al 6.
15-19-11 S. Fife, E. R. Minshall et al 5, 6.
Fife, Glidden Oil 1, 2, 3.
21-19-11 Fife, Minshall et al 1.
32-19-11 Unallotted, Holmes et al 1.
32-19-12 Company, Sam McPherson et al 1.
11-18-12 Covey, O. N. West 1-A.
25-18-13 Unallotted, T. Green 1.
17-18-14 Thatcher, W. B. Pine 1.
7-18-14 McIntosh, Edwards 1.
18-17-13 Crosly, W. A. McCullough 1-A.

**Shut Down**

11-19-13 Charles, E. H. Cornelius 1-A.
16-18-13 Kentle, L. C. Hivick 3.
34-17-12 Gilcrease, S. W. Anthoney 2.
1-17-13 Taylor, E. A. Hawley 1.
Rigs, 4; wells drilling, 21; total, 25.

## OKLAHOMA PANHANDLE

### CIMARRON COUNTY

**No Rigs**

**Wells Drilling**

22- 5- 2 ——, Sinclair Oil 1.
27- 5- 5 State land, Ramsey Bros. 1.
4- 5- 6 School land, Ramsey Pet. 1.
25- 3- 7 Israel, Gladys Belle Oil 1.

**Shut Down**

24- 6- 2 ——, Jake G. Phillips 1.
2- 2- 9 Smaltz, Fenton, Brookins & Flowers 1.
No rigs; wells drilling, 6; total, 6.

### TEXAS COUNTY

**Rig**

4- 1-13 Becker, Dutton & Hill 1.

**Wells Drilling**

28- 3-13 Zea, Wilcox O. & G. 1.
26- 1-15 Hitch, H. & H. Oil 1.
11- 1-18 Price, Three Way Oil 1.

**Shut Down**

23- 2-18 Graves, Connelly, Trammel & Danner 1.
4- 1-12 Ellison, Haley, Garber & Pulse 1.
5- 1-19 Tansey, Connelly, Trammel & Danner 1.
Rigs, 1; wells drilling, 6; total, 7.

## MISCELLANEOUS COUNTIES

**Rigs**

**Kingfisher County—**
6-16-7w Campbell, Pet. Eng. Core Drlg. 1.
23-15-5w Davison, Reiter-Foster Oil 1.
**Beckham County—**
21- 9-23 Hawkins, Bucy & Clay 1.
24- 9-23 Davis, Northland Synd. 1.
28- 9-23 Beagle, Magnolia Pet. 1.
35- 9-22 Abbott, Perfet Oil 1.
**Caddo County—**
11- 5- 9 Lacky, Magnolia Pet. 5.
**Comanche County—**
24- 2-10w Cox, Williams & Green 4.
**Jefferson County—**
4-6s-5w Gibson, Carter Oil 1.

**Wells Drilling and Shut Down**
(Shut Down Wells Indicated by *)

**Noble County—**
29-24-1w Reed, Mid-Cont. Pet. 6*.
1-24-1e 101 Ranch, Geo. Miller 1.
1-22-2w White, K-D Oil 4*.
15-21-2w Sams, Magnolia Pet. 1.
Phearson, Magnolia Pet. 1.
7-21-1w Williams, R. L. Corley 1*.
22-21-2w Abledinger, Prairie O. & G. 1.
**Harper County—**
14-25-22 Cooper, Hoffer Oil 1.
**Woodward County—**
32-24-17 Simmons, Otstot Dev. Co. 1.
25-21-21 Elmore, Sharon Oil 1*.
**Major County—**
4-23-16 Parker, Henry Randon 1*.
36-22-14 Cheyenne Basin, Texas Prod. Oil 1*.
36-21-11 Gray, Frantz & Slick 1.
**Ellis County—**
9-21-25 ——, Okla. Northern 1.
**Kingfisher County—**
16-19- 5 Kelly, Max Kelly et al 1.
27-16- 6 Sturgeon, McKenna & Crawford 1.
**Dewey County—**
9-18-15 Perfect, Huckleby & McCoy 1.
**Canadian County—**
9-14-6w Platt, A. D. Spears et al 1*.
18-13-10 North, Carroll Oil 1*.
29-13-5w Pasourick, T. B. Slick and Ben Franks 1.
**Oklahoma County—**
10-12-3w Edwards, Cromwell O. & G. 1.
9-11-1w Gludoracey, Bailey & Ramsey 1.
**Mayes County—**
8-20-19 Drew, J. L. Dixon 1*.
**McIntosh County—**
12-12-16 Love, J. A. Sheppard et al 3*.
23-11-15 Rush, Simpson Fell Oil 1.
**Sequoyah County—**
15-10-26 Fox, H. H. Orr et al 1.
**Pittsburg County—**
32- 9-16 Smith, J. L. Pattison 1.
**Haskell County—**
10- 9-18 Sanders, Marion Oil 1*.
**Cleveland County—**
7- 9-1w Alexander, Gault Brown 1.
15- 7-1w Vandeer, Sooner Oil 1.
11- 6-1w Lefeure, Magnolia Pet. 1.
25- 6-1e Byrd, Wiser Oil 1.
**Beckham County—**
35- 9-25 Adams, V. S. Nelson 1*.
25- 8-22 McGeen, W. R. Duke 3.
**Kiowa County—**
5- 6-18w Bonham, A. C. Varner 1*.
6-2s-16w ——, Landfair et al 1.
**Caddo County—**
22- 6-10w Jacobs, English Drlg. Co. 1.
29- 6-12w Gilbreath, W. J. Hartley 1*.
23- 5-11w ——, Abernathy et al 1.
2- 5-9w Machand, Gorton Turst Co. 2*.
Wade, Gorton Trust Co. 7.
10- 5-9w Bigley, Hall & Briscoe 2.
11- 5-9w Fee, Belle Hudlund 1.
12- 5-9w Rigney, J. P. Shelton et al 1.
**Comanche County—**
32- 4-10 Dockman, Abernathy et al 2.
10- 3-10w Jennings, Magnolia Pet. 1.
10- 2-10w Spitler, Danciger Oil 1*.
13- 2-10w Cox, Westheimer & Daube 1.
20- 2-10w School land, Ashcroft et al 1.
24- 2-10w Cox, Williams & Green 3*.
Allen, Shaw & Rathke 1.
14- 1-12w Wilson, Green et al 1.
29- 1-12w Bentley, Bentley et al 1.
30-1s-13w Cox, Mid-Kansas Oil 1.
**Jackson County—**
15-1s-20w Ennis, Pet. Inv. Co. 1.
**Tillman County—**
13-1s-18w Snelling, Oasis Oil 1*.
**Jefferson County—**
23-6s-6w Ryan, Skelly Oil 1.
26-7s-6w Spain, Gypsy Oil 1.
**Johnson County—**
26-4s-5e Chastain, Deese et al 1*.
**Marshall County—**
35-5s-8e Castle, Gault-Brown 1.
17-5s-6e Walter, Magnolia Pet. 1.
**Love County—**
10-6s-3e Laten, R. M. Boring et al 1.
28-6s-2e Fee, Max Westheimer 1.
Rigs, 9; wells drilling, 63; total, 72.

# KANSAS FIELDS

**Summary of Wells Completed**

| County— | Comp. | Prod. | Dry | Gas |
|---|---|---|---|---|
| Butler | 26 | 1,045 | 11 | 0 |
| Chautauqua and Elk | 10 | 1,840 | 3 | 1 |
| Cowley | 8 | 130 | 5 | 1 |
| Greenwood | 42 | 2,400 | 19 | 0 |
| Lyon | 3 | 535 | 1 | 0 |
| Sumner | 6 | 3,251 | 3 | 0 |
| Miscellaneous | 19 | 110 | 13 | 4 |
| Total February | 114 | 9,311 | 55 | 6 |
| Total January | 134 | 10,966 | 60 | 5 |
| Difference | 20 | 1,655 | 5 | 1 |

**Summary of Rigs and Wells Drilling**

| County— | Rigs | Drlg. | Ttl. |
|---|---|---|---|
| Butler | 13 | 43 | 56 |
| Chautauqua and Elk | 4 | 15 | 19 |
| Cowley | 6 | 43 | 49 |
| Greenwood | 28 | 52 | 80 |
| Lyon | 1 | 11 | 12 |
| Marion | 2 | 10 | 12 |
| Rice | 1 | 14 | 15 |
| Russell | 0 | 9 | 9 |
| Sumner | 6 | 32 | 38 |
| Woodson | 1 | 11 | 12 |
| Miscellaneous | 13 | 75 | 88 |
| Total February | 75 | 315 | 390 |
| Total January | 78 | 317 | 395 |
| Difference | 3 | 2 | 5 |

## WELLS COMPLETED BUTLER COUNTY

19-26- 8 Sturn, Liggett et al 1 ..... dry
8-27- 6 Beedles, Johnson et al 1 ..... 75
12-27- 7 Worrell, Tidal Oil 1 ..... 50
3-28- 6 Kramer, Allison & Fitzwilliams 6 ..... dry
4-28- 6 Blakeman, White Eagle O. & R. 1 ..... 60
16-26- 8 Dickinson, Tidal Oil 37 ..... 20
12-27- 7 Hill, Phillips Pet. Co. 1 ..... dry
6-27- 8 Gray, Empire G. & F. Co. 1 ..... dry
3-28- 6 Blakeman, Johnson et al 8 ..... 10
Blakeman, Mid-Kansas Oil Co. 4 ..... 80
4-28- 6 Blakeman, White Eagle O. & R. Co. 3 ..... 10
8-28- 7 Bateman, Rogers et al 1 ..... dry
35-25- 4 Dillenbeck "A," Lackawana O. & G. Co. 1 ..... 125
21-25- 8 Robbins, Sheldon et al 1 ..... dry
26-27- 4 Safford, Safford et al 9 ..... 30
8-27- 6 League, Phillips Pet. Co. 1 ..... dry
3-28- 6 Blakeman, Mid-Kan. Oil 5 ..... 55
4-28- 6 M. Blakeman, Magnolia Pet. 1 20
9-29- 6 Little, the Prairie O. & G. Co. 1 ..... dry
3-27- 6 Halford, Dav.s, Hazlett et al 1 ..... 30
17-27- 6 Rose, Richmond Drlg. Co. 2 ... dry
12-27- 7 Barnhill, The Texas Company 1 ..... 40
23-27- 7 Barnhill, Phillips Pet. 3 ... 400
7-28- 5 Layton, Kismet & Sanford 1 .. dry
5-28- 7 Semich, Empire G. & F. 1 .... 40
19-29- 4 Owens, Hartman & Skaer 1 ... dry
Wells completed ..... 26
Production ..... 1045
Dry ..... 11

## CHAUTAUQUA & ELK COUNTIES

12-31- 9 Nelson, Benge et al 1 ..... gas
14-31-10 Leffingwell, Union Gas Corp. 6 ..... 180
29-21-11 LaVille, Gillespie et al 1 .... dry
22-31-10 Lawson, Cosden et al 1 ..... dry
26-31-10 Walker, Theta Oil Co. 3 ..... 15
21-31- 9 Stiles, Kan. Cen. Oil Co. 3 ... dry
14-31-10 Chaffine, Pure Oil Co. 15 .... 1000
Chaffine, Pure Oil Co. 16 .... 325
27-33-11 Schoellkoph, the Prairie Oil & Gas 8 ..... 1
22-31-10 Webb, Frazier & Fowler 1 ... 900
Wells completed ..... 10
Production ..... 1840
Dry ..... 1
Gas ..... 1
Gas production ..... 250,000

## COWLEY COUNTY

17-32-3e Allbright, Slick & Barnsdall Oil 1 ..... dry
15-32-4e Swenson, Independent O. & G. Co. 2 ..... 150
22-32-4e Townsite, Roth & Faurot 1 ... gas
7-30- 6 White, Branson et al 1 ..... dry
6-32- 3 Stewart, Miss. Valley Oil 1 ... dry
20-32- 3 E. Carson, T. B. Slick 2 ..... dry
18-33- 7 Smith, Doric Oil Co. 1 ..... 10
19-33- 3 Holman, Brady Bros. et al 1 .. dry
Wells completed ..... 4
Production ..... 130
Dry ..... 1
Gas ..... 1
Gas production ..... 2,852,000

## GREENWOOD COUNTY

20-22-10 Browning, Sinclair Oil 51 .... 125
27-22-11 Wick, Skelly Oil 18 ..... 100
4-22-12 Fankhouser "C," The Texas Company & Simmons 5 .... 30
34-22-13 Esslinger, Davis, Hazlett et al 8 ..... 15
16-23-11 Edwards "A," The Texas Company & Simmons 3 .... 100
Edwards "A," The Texas Company & Simmons 4 .... 100
12-25- 8 Birkett, Roth & Faurot 10 .... 35
25-25- 8 Jackson, Harwood & Winters 1 ..... dry
2-22-10 Bradfield, Manhattan Oil Co. et al 1 ..... dry
20-22-10 Browning, Sinclair Oil 52 .... 150
14-22-11 Fromme, Empire G. & F. Co. 15 ..... 30
22-22-11 Garth, Empire G. & F. Co. 3.. 100
9-22-12 Swanson, The Texas Company 3 ..... 120
9-22-13 Todd, Skelly Oil Co. 1 ..... dry
16-23-11 Edwards "A," The Texas Company & Simmons 5 .... 220
Edwards "E," The Texas Company & Simmons 2 .... 150
31-24-11 Rockhill, Theta Oil Co. 4 .... dry
9-25-10 Carrington, McGinnis et al 1.. dry
8-26-11 Burk, Ballard et al 1 ..... dry
19-22-10 Browning, Superior Oil Co. 9.. 75
18-22-11 Clopton, Simmons et al 6 .... 25
10-22-12 Boles, Darby et al 1 ..... 125
33-22-13 Blank, Simmons & Rhodes 1.. dry
10-23-10 Laird, Roth, Faurot et al 1 .. 15
19-23-10 Race, Roth, Faurot et al 2 .. dry
7-23-11 Edwards, Marland Oil Co. 3.. dry
21-23-11 Edwards, Empire G. & F. 3.. 150
26-23-11 Ellis, Simmons et al 5 .... 175
4-23-13 Inthurm, Haverhill Pet. 16.. 40
7-26-10 Edwards, Intl. Oil Co. 1 .... dry
3-22-10 Pixlee, Tidal Oil 3 ..... dry
8-22-10 Pixlee, Theta Oil 14 ..... 125
11-22-11 Kipfer, Tidal Oil 8 ..... dry
15-22-12 Boles, Balliere et al 1 ..... dry
14-23- 9 Green, Murphy et al 4 ..... dry
15-23- 9 Green, Skelly Oil 8 ..... 15
25-23-10 Allen, Pryor & Lockhart 1 ... dry
18-23-11 Allen, Rogers & Manhattan Oil 6 ..... dry
21-23-11 Edwards, Empire G. & F. 2.. 100
14-23-12 Bock, Kismet et al 1 ..... dry
17-25-10 Hammond, Abel, Finney et al 1 ..... dry
2-28- 8 Edgar, Hibbard et al 1 ..... dry
Wells completed ..... 42
Production ..... 2400
Dry ..... 19

## LYON COUNTY

25-21-10 Bradfield, McCulloch Oil 2 ... 500
16-21-11 Lester, Golden et al 1 ..... dry
31-21-10 Atyeo "A," Transcon. Oil 9 ... 35
Wells completed ..... 3
Production ..... 535
Dry ..... 1

## SUMNER COUNTY

36-30-2w Riner, Cosden et al 1 ..... dry
25-31-2e Churchill, Roxana Pet. 6 .... 750
23-30- 2 Mauric, Phil-Mac Oil 1 ..... dry
25-31 2e Rutter, Roxana Pet. 3 ..... 1000
Shore "B," Roxana Pet. 1 .... 1501
22-33-2w Mickley, National Union Oil 1 ..... dry
Wells completed ..... 6
Production ..... 3251
Dry ..... 3

## MISCELLANEOUS

**Chase County —**
23-22- 9 Crosby, Pryor, Lockhart et al 2 ..... dry
36-22- 7 Frew, Taylor et al 1 ..... dry
29-18- 7 Lipps, Empire G. & F. 6 .... gas
30-18- 7 Lipps, Preston & Pasewalk 3.. gas
36-18- 6 Nelbert, Preston & Pasewalk 2 ..... gas
25-21- 9 Stotler, Barnsdall Oil 2 ..... 25
Lewis, Sinclair Oil 2 ..... dry
**Coffey County—**
32-21-14 Pennock, Ritchey & Moore 1.. dry
**Edwards County—**
7-23-19 Nibersail, Edwards County Pet. 1 ..... dry
**Marion County—**
13-21- 4 Allison, Sheedy et al 1 ..... dry
34-18- 4 Utting, Empire G. & F. 1 .... dry
16-21- 4 Waner, Larlaux & Robinson 1 ..... dry
29-18- 4 Propp, Nicolls et al 1 ..... dry
20-19- 4 Propp, Propp et al 1 ..... dry
**Osborn County—**
19- 8-13 Bliss, Krueger et al 1 ..... dry
**Reno County—**
35-23- 7 Nesley, Fleeger & Mid-Kansas Oil 1 ..... dry
**Russell County—**
20-13-15 Sloan, Keys Pet. 1 ..... dry
**Rice County—**
35-20-6w Harder, Phillips Pet. 2 ..... 85
**Woodson County—**
9-25-14 Stephenson, Fields, Cross et al 3 ..... gas
Wells completed ..... 19
Production ..... 110
Dry ..... 13
Gas ..... 4
Gas production ..... 10,500,000

**BUTLER COUNTY**
**Rigs**

25-24- 7 Stone, Powell et al 1.
20-26- 3 Hoerman, Empire G. & F. 1.
Marmane, Phillips Pet. 1.
33-26- 6 Nichols, Phillips Pet. 1.
36-27- 5 Colbert, Reynolds et al 1.
3-27- 6 Lewis, Davis, Hazlett et al 1.
4-27- 6 Beedles, Johnson et al 2.
Shaffer, Rosenthal, Lassen et al 4.
Worrell, Tidal Oil 2.
12-27- 7 Wallace, Empire G. & F. 18.
11-28- 4 Kramer, Allison & Fitzwilliams 7.
3-28- 6 Gilson, Mid-Kansas Oil 1.
13-28- 7 French, Davidson et al 1.

**Wells Drilling**

29-25- 8 Jahren, White Eagle O. & R. 1.
31 25- 8 Jahren, McPherson & Jones 1.
20-26- 3 Hoerman, Barnsdall Oil 1.
20-26- 5 Koogler, Empire G. & F. 74.
24-26- 5 Mossman, "A," Lellow & Travis 1.
20-26- 8 Drum Bitler, Rogers et al 12.
29-26- 8 Drum Bitler, Rogers et al 13.
31-26- 8 Drum Bitler "B," Rogers et al 2.
Gray, White Eagle O. & R. 1.
35-27- 4 Starkey, Empire G. & F. 14.
4-27- 6 Beedles, Johnson et al 1.
Edwards, Phillips Pet. 1.
Shaffer, Rosenthal, Lassen et al 3.
8-27- 6 Beedles, Phillips Pet. 1.
9-27- 6 McGinnis, Allison & Fitzwilliams 1.
Tatum, Phillips Pet. 2.
17-27- 6 Oldbury, Phillips Pet. 1.
33-27- 6 Stern, Magnolia Pet. 1.
12-27- 7 Worrell, Empire G. & F. 5.
13-27- 7 Parker, Phillips Pet. 1.
Seward, Phillips Pet. 5.
14-27- 7 Harris, Sinclair Oil 2.
17-28- 3 Staley, Findiess et al 1.
11-28- 4 Haxlett, Empire G. & F. 10.
4-28- 6 Blakeman, Magnolia Pet. 4.
18-27- 7 Morti, Abel, Finney et al 1.
26-28- 7 Ramp, B. G. & M. Oil 1.
33-28- 7 Peak, Mid-Kansas Oil 1.
15-29- 3 Davis, Douglas et al 1.
28-29- 3 Kramer, Shawver et al 1.
7-29- 4 Holcomb, Producers Pet. 1.
5-29- 5 Plummer, Ramsey et al 2.
33-29- 8 Hanna, Roth & Co. 11.

**Shut Down**

18-25- 4 Joseph, Wichita Drlg. Co. 1.
29-25- 4 Varner, Lenoir et al 2.
30-26- 6 McClure, Foraker et al 1.
2-26- 7 Cannon, Basom et al 1.
27-26- 7 Young, Empire G. & F. 1.
1-27- 7 Lucas, White Eagle O. & R. 1.
25-29- 3 Schmitz, B. G. M. Oil 1.
21-29- 4 Holcomb, E. Wilcox et al 1.
9-29- 5 Houser, Branson et al 1.
12-29- 6 Keneyon, Tobin et al 1.
Rigs. 13; wells drilling, 43; total, 56.

**CHAUTAUQUA & ELK COUNTIES**
**Rigs**

8-29-11 Reid, Kismet Oil 1.
29-30-12 Dunlap, Harvey & Robinson 1.
1-31- 9 Bace, Roth, Faurot et al 1.
14-31-10 Chaffin, Pure Oil 17.
25-31-10 Rettig, Bedel Oil 1.

**Wells Drilling**

13-29- 8 Porter, Allison & Fitzwilliams 1.
Porter, Empire G. & F. 5.
27-29- 8 Erickson, Roth & Co. 1.
17-29-10 Keck, Arkansas Fuel Oil Co. 3.
14-30-10 Miller, Elmwood Oil 1.
10-31- 8 Denton, Page Oil 1.
11-31- 9 Crist, Ohio Fuel Oil Co. 1.
16-31- 9 Loggon "A," Smith, Ash et al 1.
14-31-10 Leffingwell, Union Gas Corp. 7.
23-31-10 Webb "B," Union Gas Corp. 1.
28-31-10 Johns, Landon et al 1.
2- 5-27 Schoellkoph, the Prairie O. & G. 9.

**Shut Down**

11-32-10 Jeanerette, Griffeth & Strueb Oil 1.
4-29- 9 Britton, McCullough & Tolbot 1.
29-31-11 Welch, Superior Oil 1.
Rigs. 4; wells drilling, 15; total, 19.

**COWLEY COUNTY**

20-30- 6 Manley, Allison & Fitzwilliams 1.
20-31- 4 Hughes, Brinn et al 1.
6-31- 6 Eastman "C," Empire G. & F. 2.
22-32- 4 Dibbons, T. B. Slick 4.
Winfield Townsite, Wakefield et al 1.
8-33- 5 Bailey, Klossie & Kitchell 1.

**Wells Drilling**

21-30- 3 Carlson, Roxana Pet 1.
30-30- 4 Dickson, Trees Oil 1.
24-30- 6 Ward, Payne & Hellmick 1.
36-30- 6 Marshall, Herron et al 1.
21-31- 4 Ross, Twin State Oil 2.
22-31- 4 King, McCullough et al 1.
33-31- 4 Goodrich, Brinn et al 1.
4-31- 5 Elliott, Tatlock & McCullough 1.
13-31- 7 McCormick, Empire G. & F. 1.
20-32- 3 Carson, T. B. Slick 1.
15-32- 4 School land, J. A. Hull 4, 5.
Swenson, Independent O. & G. 1.
State land, State Gas Co. 2.
Wallace, Tidal Oil & Skelly Oil 3.
Graham, Marland Oil 4.
Graham, McMahan et al 1.
State land, McNabb et al 1.
17-32- 4 Beinhorn, Leighty et al 1.
22-32- 4 Townsite, Foster, Deal et al 1.
Dibbons, T. B. Slick 2.
Winfield Townsite, Roth & Faurot 1.
Brane, Sutter & Adams 1.
Wallace, McNabb et al 2.
33-32- 4 Mitishler, McNabb & Sidwell 1.
6-32- 5 Brown, Ark. Fuel Oil Co. 3.
8-33- 3 Thurlow, Barnsdall Oil 1.
28-33- 3 State land, Babcock et al 1.
4-33- 7 Reynolds, Forrester et al 1.
4-34- 3 Beeks, Gypsy Oil 1.
19-34- 3 Bestle, Marland Oil 1.
35-34- 3 DeEard, Derby Oil 1.
25-34- 6 Day, Lewis et al 1.
6-35- 4 Buckles, Marland Oil 1.
16-35- 4 Dudden, Pyle et al 1.

**Shut Down**

20-30- 3 Nave, Roxana Pet. 1.
29-30- 3 Beard, Roxana Pet. 1.
30-30- 3 Belswanger, Pyle et al 1.
6-31- 3 Cook, Sinclair Oil 1.
15-32- 4 School land, Marland Oil 2.
8-33- 5 Bell, Neeley O. & G. 1.
7-33- 7 Riding, Brown Brothers 1.
3-35- 4 Eaton, Dickey et al 1.
Rigs. 6; wells drilling, 43; total, 49.

**GREENWOOD COUNTY**
**Rigs**

20-22-10 Browning, Sinclair Oil 56, 54.
11-22-11 Hind, Empire G. & F. 11.
Hind, Stark et al 1.
14-22-11 Gravette, Empire G. & F. 4.
Hood, Roxana Pet. et al 1, 2.
18-22-11 Clopton, Simmons et al 4.
23-22-11 Duby, Empire G. & F. 12.
24-22-11 Broddock, Fisher-Lauck 1.
27-22-11 Wick, Skelly Oil 19.
29-22-11 DeMalorie "D," York State Oil 1.
9-22-12 Swanson, Bement & Amerada Pet. 1.
Swanson, The Texas Company 4.
10-22-12 Boles, Darby et al 2.
16-23- 9 Teter, Empire G. & F. 36.
12-23-10 Hale, Elmwood & Parker 1.
16-23-11 Edwards "E," The Texas Company & Simmons 3, 4.
21-23-11 Edwards, Empire G. & F. 5, 6.
16-23-12 Cox, Patterson et al 1.
24-23-12 Fletcher, Stark et al 1.
4-23-13 Inthrum, Haverhill Pet. 17.
36-24-10 Mock "A," McGinnis & Manhattan Oil 2.
19-24-11 Freeman, Christler et al 2.
10-25-10 Hammond, McGinnis et al 1.
28-26- 9 Klein, Magnolia Pet. 3.

**Wells Drilling**

22-24-12 Johnson "B," the Prairie O. & G. 1.
2-22-10 Sheppard, Manhattan Oil 3.
Bradfield, Syndicate Oil 7.
7-22-10 Pixlee, Empire G. & F. 1.
17-22-10 Browning, Theta Oil 18.
19-22-10 Browning, Sinclair Oil 53, 55.
12-22-11 Inthrum, Empire G. & F. 2.
14-22-11 Duby, Empire G. & F. 10, 11.
13-22-12 Schultz, Schwartz et al 1.
36-22-12 Fankhouser, Empire G. & F. 1.
7-22-13 Storer, Empire G. & F. 2.
32-22-13 Lue, Skelly Oil 2.
26-23- 8 Ward, Phillips Pet. 1.
11-23- 9 Nettle, Phillips Pet. 1.
15-23- 9 Teter, Scott et al 1.
15-23- 9 Skelly-Teter, Skelly Oil 4.
4-23-10 Barnard, Abel & Rhodes 1.
6-23-10 Barnard, Basom et al 1.
8-23-10 Culver, Leonard Pet. et al 1.
22-23-10 Tucker, Roth, Faurot and Manhattan Oil 4.
21-23-11 Edwards, Empire G. & F. 4.
26-23-11 Ellis, Mid-Continent Pet. Corp. 2.
3-23-12 Schwab, Sullivan et al 1.
8-23-12 Martin, Mathews et al 1.
12-23-12 Wengler, Simmons & Rhodes 1.
6-23-13 Slour, Mid-Kansas Oil 1.
15-23-13 Shadell, Tidal Oil 12.
4-24-10 Williams, Basom et al 1.
36-24-10 Mock, McGinnis et al 5.
7-24-11 Gaffney, Henderson & Holdren 1.
17-24-11 Robertson, Sinclair Oil 1.
18-24-11 Dugan, Empire G. & F. 3.
1 25- 8 Bickett, Roth & Faurot 11.
25-25- 8 Jackson, Mid-Kansas Oil 5.
35-25- 8 Ladd, Harwood, Winters & Marland 1.
30-25-11 Whipper, Jennings et al 1.
10-26- 8 Hull, Kinney Ref. 7.
26-26- 8 McGinnis, Flack et al 1.
7-27- 9 Riley, Empire G. & F. 3.
7-27-10 Weaver, Griffeth et al 1.
2-28-11 Schultz, McCullough et al 1.

**Shut Down**

26-23-12 Bigler, Spencer, Chambers et al 1.
4-23-13 Inthurm, Gore & Skelly 2.
23-24-10 Edwards, Edwards et al 1.
5-24-13 Bayes, McCullough et al 1.
25-26- 9 Saurwine, Kurtz et al 1.
16-26-11 Hughes, Brown & Emerson 1.
25-27-10 Hanson, Marshall et al 1.
33-27-11 Benest, Winona O. & G. 1.
1-28-12 Hays, Swanson et al 1.
Rigs. 28; wells drilling, 52; total, 80.

**LYON COUNTY**
**Rigs**

30-21-12 Hooper, Leward Pet. 1.

**Wells Drilling**

2-21-10 Rossillion, Marland Oil 1.
25-21-10 Bradfield, Jackson & Wise 2.
Bradfield, McCullough et al 1.
Bradfield, Ritchey & Moore 2.
26-21-10 Lemotoux, Kelloge Drlg. Co. 1.
30-21-10 Jones, Theta Oil 8.
Atyeo, Transcontinental Oil 12.
31-21-12 Jones, Schwartz et al 3.

**Shut Down**

25-19-10 Bibermyer, Culp et al 1.
32-20-13 Scott, Gascho & Balliere 1.
24-21-10 Rossillion, Super Six Oil 4.
Rigs. 1; wells drilling, 11; total, 12.

**MARION COUNTY**
**Rigs**

2-18- 4 Harke, Cress, Frank et al 1.
19-20- 4 Harrison, Tulsa Oil et al 1.

**Wells Drilling**

8-17- 3 Damon, Ark. Fuel Oil 1.
22-17- 4 Hazineck, Frank et al 1.
22-17- 4 Hazineck, Phillips Pet. 1.
33-17- 4 Houser, Frank et al 1.
8-18- 4 Novac, Shook et al 1.
20-18- 4 Melcher, Skow Bros. & Richey 1.
24-19- 3 Houser, Leward Pet. Co. 1.
8-19- 4 Propp, Youker, Propp et al 2.
23-18- 3 Vinguska, Skow Bros. et al 1.
28-20- 4 Stafford, Hartman & Skaer 1.
Rigs. 2; wells drilling, 10; total, 12.

**RICE COUNTY**
**Rigs**

34-21- 7 Trotter, Mississippi Valley Oil 1.

**Wells Drilling**

1-19- 7 Deed, Pryor & Lockhart 1.
26-20- 6 Johanson, Midland Oil 1.
35-20- 6 Welch, Skelly Oil 2.
2-21- 6 Jacobson, Sand Creek Oil 2, 3.
Walsten, Indpt. O. & G. 3, 4, 5.
3-21- 6 Miller, Indpt. O. & G. 2.
Miller, Phillips Pet. 1.
2-21- 6 Walstein, the Prairie O. & G. 2, 3.
5-20- 6 Miller "A," the Prairie O. & G. 3.

**Shut Down**

2-19-10 Hollscher, Sparta Drlg. Co. 1.
Rigs. 1; wells drilling, 14; total, 15.

**RUSSELL COUNTY**
**No Rigs**
**Wells Drilling**

32-11-15 Dodge, Derby et al 5.
17-12-15 Munsell, Wilcox O. & G. 2.
19-12-15 Ginther, Wilcox O. & G. 1.
30-12-15 Ginther, Mid-Kansas Oil 33.
6-14-12 Kistler, Kettle & Shoemaker 1.
5-14-15 Mermis, Mid-West Ref. 31.
8-14-15 Dortland, Keys Pet. 1.
22-15-11 Lilak, Streeter & Stearns 1.

**Shut Down**

13-11-13 Hospishal, Krueger et al 1.
Rigs. 0; wells drilling, 9; total, 9.

**SUMNER COUNTY**
**Rigs**

24-31-2e Shore, Vickers & Johnson 3.
25-31-2e Van Sickle, Roxana Pet. 4.
17-32-2e Norris, I. T. I. Oil 2.
32-33-3w Bartlow, Otstot et al 1.
9-35-1e Volker, Otstot et al 1.
11-34-4w Wycoff, Jarvis et al 1.

**Wells Drilling**

4-30-1w Wheeler, Champlin O. & R. 1.
9-30-1w La Force, Champlin O. & R. 1.
30-30-2e Alter, Phil-Mac Oil 1.
9-30-2w E. Latta, Champlin O. & R. 1.
19-30-4w Kelly, Champlin O. & R. 1.
3-31-2e Griffeth, Gypsy Oil 1.
24-31-2e Everts, Amerada Pet. 1.
Shore, Vickers & Johnson 2.
Shore, Roxana Pet. 2, 3.
25-31-2e Wiles, Roxana Pet. 1.
Riverbed, Roxana Pet. 3.
Mason, Roxana Pet. 2, 3.
Rutter, Roxana Pet. 2.
25-31-2e Churchill, Roxana Pet. 5.
Herrick, Wentz Oil 4.
Reitz, Derby Oil 1.
36-31-2e Riverbed, Roxana Pet. 2.
Island, Selby O. & G. 1.
8-31-3w Orr, Carter Oil 1.
25-32-1e Wirth, De Hart et al 1.
3-32-2e Reese, Magnolia Pet. 1.
14-32-2e Buffington, Amerada Pet. 1.
34-32-2e Nofsinger, Shawver et al 1.
25-33-2e Swain, Marland Oil 1.
15-34-1e Fulcher, Homa-Wood Oil 1.
9-34-2e White, Roxana Pet. 1.
24-34-2w Douglas, Gypsy Oil 1.
11-35-1e Hull, Marland Oil 1.

**Shut Down**

18-35-1e Hamilton, Amerada Pet. 1.
16-35-2e White, Washahoma Oil 1.
Rigs. 6; wells drilling, 32; total, 38.

**WOODSON COUNTY**
**Rigs**

23-26-14 Lauber, Peerless O. & R. 4.

**Wells Drilling**

21-23-14 Otto, Hillside Oil 3.
30-23-14 Collins, Little Seven Oil 5.
17-25-14 Weide, Fields & Cross 1.
13-26-14 Daniels, Skelly Oil 2.
23-26-14 Duncan, Peerless O. & R. 1.
Lauber, Peerless O. & R. 3.
26-26-14 Gregory, McMullen et al 1.
27-26-14 Henley, Peerless O. & R. 1.

**Shut Down**

13-25-14 Hunt, Alters et al 1.
13-26-14 Daniels, Skelly Oil 1.
23-26-14 Lauber, McCullough et al 1.
Rigs. 1; wells drilling, 11; total, 12.

**MISCELLANEOUS**

**Chase County—**
4-18- 7 Anderson, Empire G. & F. 1.
30-18- 7 Lipps, Preston & Pasewald 4.
**Coffey County—**
19-22-16 Decker, Ritchey & Moore 1.
**Ellis County—**
27-13-16 Reidell, Mid-West Refg. Co. 19.
13-13-18 Gerstner, Keys Promotion Co. 1.
**Harvey County—**
3-21-3e Sowder, Kansas Central Oil 1.
**McPherson County—**
22-18-2w Oberland Otstot et al 1.
**Morris County—**
32-14-7e Barber, Klein et al 1.
**Osage County—**
29-18-16 Blank, Young et al 1.
**Pottawatomie County—**
17- 9-12 Stewart, Crawford et al 1.
31- 9-12 Bratchbar, Crawford et al 1.
**Sedgwick County—**
9-25-2e Harrison, Smith & Keller 1.
**Smith County—**
18- 5-15 Smith, Gardener et al 1.

**Wells Drilling and Shut Down**
(Shut Down Wells Indicated by *)

**Barber County—**
35-32-14 Ott, Vickers & Miller 1*.
13-33-13 Alexander, Schaffer O. & G. 1.
**Barton County—**
9-16-15 Craft, Johnson et al 1.
25-17-15 Boyle, Phillips Pet. 1.
28-18-12 Sooy, Rankin et al 1.
17-19-11 Smith, Huffine et al 1.
12-20-13 Ward, Everette & Wiley 1*.
**Chase County—**
29-18- 7 Lipps, Empire G. & F. 7.
32-18- 7 Lipps, Empire G. & F. 8.
15-21- 9 Camon, Empire G. & F. 1.
25-21- 9 Stotler, Barnsdall Oil 1*.
36-21- 9 Atyeo, Sheedy et al 2.
**Clark County—**
21-32-21 Stephens, Watchorn O. & G. 1.
**Cloud County—**
6- 6-4w Murdock, Concordia O. & P. Co. 1.
**Coffey County—**
10-21-15 Bodley, Kinney et al 1*.
11-23-13 Young, Sheedy et al 1.
14-23-16 Jones, Fidelity Oil Co. 1*.
**Dickinson County—**
23-13-3e Jones, Leward Pet. 1.
7-16-1e Elison, Dewey et al 1.
**Franklin County—**
17-16-18 Owens, Thrice, Smith & Fisher 1*.
**Geary County—**
18-11- 5 Kurtz, Kirby & Wright 1.
**Harper County—**
19-32- 5 Burk, Berry Pet. 1*.
22-34- 6 Caton, Bu-Vi-Bar Pet. 1.
**Harvey County—**
10-23-3w Freeson, Liggett et al 1.
**Hodgeman County—**
19-21-22 Frizzell, Spencer & Marconnette 1.
**Jefferson County—**
13- 9-19 Edwards, Northern Counties Oil 1*.
**Kingman County—**
20-27- 7 Woolsey, Pyle et al 1.
**Labette County—**
26-32-17 Wilks, Ark. Fuel Oil 1*.
1-32-20 Thurman, Noble O. & G. 1*.
33-32-20 Barnes, W. C. Willy 1*.
1-33-17 Hornbeck, Cowell et al 1*.
5-35-20 Lipps, Wantland et al 1*.
**McPherson County—**
29-18-2w Anderson, Merriman et al 2.
22-18-3w Hanson, McLaughlin et al 1.
30-21-5w Ross, Lanfin et al 1*.
**Montgomery County—**
21-31-14 Faler, Ramler et al 1*.
21-32-13 Keiman, Dunn et al 1*.
36-32-14 Dryhead, Irish et al 1*.
5-32-16 Brinkman, Cowell et al 1*.
35-32-16 Wyberger, Bloom et al 1*.
29-32-17 Helium, Earl & Overlease 1*.
35-33-16 Felt, Voice & Tabor 1*.
4-33-17 Hall, Townsend et al 1*.
30-33-17 Bunk, Brown & Wolf 1*.
28-34-14 Owens, Phillips Pet. 1*.
12-35-16 Wilson, Tex-O-Kan Oil 1*.
4-35-17 Walker, Gallowye & Roberts 1*.
**Morris County—**
14-16- 7 Hammer, Nicoll et al 1.
24-17- 9 Cessman, Rock Creek O. & G. 1*.
**Nemaha County—**
19- 3-11 Myers, Nemaha O. & G. 1.
**Osage County—**
3-15-15 Lease, Barber et al 1*.
27-15-16 Baley, West et al 1*.
8-17-17 Nell, Mull-Vit Dev. Co. 1*.
**Pawnee County—**
32-21-16 Lovette, Troup et al 1*.
**Pottawatomie County—**
11-10-12 St. Mary, Crawford et al 1*.
**Rawlins County—**
5- 3-34 Blank, Byson Oil 1.
**Reno County—**
10-23- 4 Magnuson, Sheldon et al 1.
24-24-8w Smith, Hartman & Skaer 1.
4-26-4w Griffeth, Marland Oil 1.
25-26-9w Dutton, T. B. Slick 1.
**Riley County—**
20-10- 7 Thierer, Youker et al 1.
**Rooks County—**
11- 9-16 Lukman, Livingston et al 1.
**Saline County—**
29-14-2w Davis, Johnson et al 1.
26-15-2w Sheldon, Brown & Woodward 1.
15-15-4w Holquest, Thrall et al 1*.
**Sedgwick County—**
6-25-1e Poff, Boyle et al 1.
34-26-1e Jaden, Wichita O. & G. 1*.
29-29-2e Hansaber, Johnson et al 2.
**Seward County—**
33-32-34 Hitch, Vickers Pet. 1*.
14-33-33 Son, Wilson et al 1*.
**Stafford County—**
24-22-11 Richardson, Randall et al 1*.
**Wabaunsee County—**
15-13-12 Henderson, Williams et al 1*.
**Wilson County—**
3-27-14 Daniels, Allison & Fitzwilliams 1.
22-28-13 Thompson, Price et al 1.
29-30-17 Smally, West & Williams 1*.
Rigs. 13; wells drilling, 75; total, 88.

# NORTH AND WEST TEXAS

**Summary of Wells Completed**

| West Texas— County— | Comp. | Prod. | Dry | Gas |
|---|---|---|---|---|
| Crane | 15 | 18,301 | 2 | 0 |
| Crockett | 1 | 0 | 1 | 0 |
| Ector | 1 | 0 | 1 | 0 |
| Howard | 7 | 566 | 0 | 0 |
| Jones | 3 | 2,300 | 1 | 0 |
| Midland | 1 | 0 | 1 | 0 |
| Mitchell | 8 | 763 | 0 | 0 |
| Reagan | 10 | 1,891 | 3 | 0 |
| Runnels | 2 | 0 | 2 | 0 |
| Terrell | 1 | 0 | 1 | 0 |
| Upton | 37 | 11,901 | 5 | 0 |
| Total West Texas | 86 | 35,722 | 17 | 0 |
| North Central Texas— | | | | |
| Archer | 57 | 2,370 | 27 | 0 |
| Baylor | 1 | 0 | 1 | 0 |
| Brown | 79 | 16,835 | 31 | 0 |
| Callahan | 8 | 8 | 4 | 0 |
| Clay | 4 | 8 | 3 | 0 |
| Coleman | 9 | 0 | 9 | 0 |
| Cooke | 10 | 319 | 4 | 0 |
| Eastland | 10 | 325 | 4 | 0 |
| Jack | 9 | 248 | 3 | 0 |
| Montague | 51 | 1,640 | 9 | 0 |
| Palo Pinto | 2 | 135 | 1 | 0 |
| Shackelford | 44 | 3,264 | 14 | 1 |
| Stephens | 12 | 559 | 5 | 2 |
| Throckmorton | 8 | 551 | 5 | 0 |
| Wichita | 45 | 987 | 21 | 0 |
| Wilbarger | 30 | 3,361 | 2 | 0 |
| Young | 18 | 484 | 8 | 0 |
| Total North Texas | 394 | 31,094 | 151 | 3 |
| Grand total Feb. | 480 | 66,816 | 168 | 3 |
| Grand total Jan. | 434 | 46,430 | 159 | 5 |
| Difference | 46 | 20,386 | 9 | 2 |

**Summary of Rigs and Wells Drilling**

| West Texas— County— | Rigs | Drlg. | S.D. | Ttl. |
|---|---|---|---|---|
| Crane | 27 | 31 | 2 | 60 |
| Crockett | 2 | 6 | 2 | 10 |
| Howard | 7 | 19 | 4 | 30 |
| Jones | 3 | 21 | 7 | 31 |
| Mitchell | 6 | 12 | 3 | 21 |
| Reagan | 3 | 26 | 2 | 35 |
| Upton | 7 | 49 | 2 | 58 |
| Miscel. | 23 | 53 | 42 | 118 |
| Total February | 78 | 217 | 65 | 360 |
| North Texas— | | | | |
| Archer | 12 | 39 | 10 | 61 |
| Brown | 10 | 87 | 25 | 122 |
| Callahan | 2 | 14 | 11 | 27 |
| Coleman | 0 | 15 | 13 | 28 |
| Cooke | 2 | 10 | 11 | 23 |
| Eastland | 11 | 26 | 4 | 41 |
| Jack | 0 | 12 | 3 | 15 |
| Montague | 7 | 22 | 11 | 40 |
| Shackelford | 10 | 61 | 9 | 80 |
| Stephens | 4 | 10 | 4 | 18 |
| Throckmorton | 2 | 16 | 5 | 23 |
| Wichita | 2 | 49 | 8 | 59 |
| Wilbarger | 11 | 49 | 9 | 69 |
| Young | 4 | 24 | 7 | 35 |
| Miscellaneous | 2 | 11 | 25 | 38 |
| Total, Feb. | 79 | 445 | 155 | 679 |
| Grand total, N. & W. Texas, Feb. | 157 | 662 | 220 | 1,039 |
| Grand total, Jan. | 141 | 696 | 184 | 1,021 |
| Difference | 16 | 34 | 36 | 18 |

**NORTH CENTRAL TEXAS COMPLETIONS**
**ARCHER COUNTY**

Turbeville, American Ref. Co. et al 10.. 35
Scaling, Atlantic City Prod. Co. 1 ..... dry
Abercrombie & Taylor-A, Bridwell & Heydrick 9 ..... 35
Abercrombie & Taylor-A, Bridwell & Heydrick 10 ..... 30
Perkins, Brown, Bass & Dillard 1 ..... dry
Turbeville-D, L. T. Burns 2 ..... 135
Turbeville-D, L. T. Burns 3 ..... 171
Wilson, Continental Oil & Maer & Stanforth 1 ..... dry
Oldham, Continental Oil & Republic Prod. Co. 5 ..... dry
Scott, Davis-Hart Oil Co. ..... dry
Wilson, Dixie Oil Co., Inc. 1 ..... dry
Wilson, Gohlke et al 2 ..... dry
Prideaux, Golding, Cochran & Cline 10. dry
P. P. Langford, Gulf Prod. Co. 3 ..... dry
T. T. Meade, Gulf Prod. Co. 1 ..... dry
A. Pastusek, Gulf Prod. Co. 1 ..... dry
Turbeville, Gwynn et al 1 ..... dry

Wilson, Haslett & Simons 2 ..... 45
Hutcheson, Humble Oil & Ref. Co. et al 1 ..... dry
Parrish Bros.-C, Humble Oil & Ref. Co. 1 ..... dry
Wilson, T. F. Hunter 3 ..... 25
Wolf, Kruger et al 1 ..... 50
Hudson, Jesse Lincoln 1 ..... 15
Hudson, Magnolia Pet. Co. 9 ..... 19
Hudson, Magnolia Pet. Co. 10 ..... 21
Lowe, Magnolia Pet. Co. 30 ..... 15
Turbeville, Marland Oil Co. 17 ..... 465
Perkins, Marland, Bass & Dillard 3 ... dry
Riggs, Mark Kleedon 1 ..... dry
Lowe, Mid-Kansas Oil & Gas Co. 5 ..... 35
Schafner, Milham Corp. 1 ..... dry
Lyles, Muse Robinson et al 1 ..... dry
Hudson, Pandem Oil Corp. 7 ..... 20
Parrish, Payne et al 3 ..... 35
Perkins, Perkins & Cullum 1 ..... dry
Thomas, Petroleum Prod. Co. 2 ..... dry
Turbeville, Petroleum Prod. Co. et al 13 35
Turbeville-C, Petroleum Prod. Co. 2 ... dry
Lyles, Phillips & Skinner 1 ..... dry
Wilson, Plains Prod. Co. 1 ..... dry
Miller, Pois & Schultz 1 ..... 135
Jentsch, Rowe et al 3 ..... 12
Abercrombie & Taylor, Roxana Pet. Corp. 13 ..... 60
Abercrombie & Taylor-A, Roxana Pet. Corp. 15 ..... 60
Abercrombie & Taylor-B, Roxana Pet. Corp. 4 ..... 27
Turbeville-A, Simms Oil & Burns 6 ... 75
Turbeville-A, Simms Oil & Burns 7 ... 10
Turbeville-A, Simms Oil Co. 16 ..... 450
Turbeville-A, Simms & Burns 6 ..... 150
Starr, Steadham & Thrasher 1 ..... dry
Green-B, Sun Oil Co. 2 ..... 30
Jentsch, The Texas Co. 2 ..... 30
Neal, The Texas Co. 1 ..... dry
Prideaux-B, The Texas Co. 8 ..... 5
Turbeville-E, The Texas Co. & Consolidated Oil Co. 1 ..... dry
Turbeville-A, Tidal Oil Co. 2 ..... dry
Ward, Underwood Drilling Co. et al 2.. 150

Wells completed ..... 57
Production ..... 2370
Dry ..... 27

**BAYLOR COUNTY**

Sykora, Pandem Oil Corp. 2 ..... dry

Wells completed ..... 1
Production ..... 0
Dry ..... 1

**BROWN COUNTY**

Whitted, Advance Oil Co. 1 ..... dry
J. H. Fry, Amerada Pet. Corp. 15 ..... 770
J. H. Fry, Amerada Pet. Corp. 16 ..... 60
J. H. Fry, Amerada Pet. Corp. 18 ..... 1021
Hodnett, Anderson & Shults 1 ..... dry
Thomason, Anderson et al 1 ..... dry
Armstrong, Anna Belle Oil Co. 2 ..... 30
Willis, Barbara Oil Co. 2 ..... 25
Weedon, Bevens 1 ..... dry
George, Brown & Co. 1 ..... dry
Weedon, Brown 1 ..... dry
Andrews, Charter Oil Co. 4 ..... 25
Arledge, Cosden 4 ..... dry
East Westerman, Cosden 5 ..... 125
Eads, Cranfill & Reynolds 1 ..... dry
Newton, Curry et al 1 ..... 441
White estate, Gibson Oil Co. 4 ..... 40
Eddington, Halloran et al 3 ..... dry
Lowe, Henshaw 8 ..... 1200
Lowe, Henshaw et al 10 ..... 800
Lowe, Henshaw 12 ..... 1250
Lowe, Henshaw 14 ..... 1400
Lowe, Henshaw et al 16 ..... 1235
Lowe, Henshaw et al 22 ..... 750
Armstrong, Humble Oil & Ref. Co. 7 .. 125
Foster, Humble Oil & Ref. Co. 8 ..... 20
Foster, Humble Oil & Ref. Co. 9 ..... 20
Foster, Humble Oil & Ref. Co. 10 ..... dry
Hickman, Humble Oil & Ref. Co. 8 ..... 30
Hickman, Humble Oil & Ref. Co. 10 ... 72
Hodnett, Humble Oil & Ref. Co. 11 .... 75
Hodnett, Humble Oil & Ref. Co. 3-B ... dry
Hodnett, Humble Oil & Ref. Co. 6-B ... 100
D. C. Wooldridge, Humble Oil & Ref. Co. 11 ..... dry
H. A. Newton, Humphrey Bros. 6 ..... dry
Crothers, Inland Oil Co. 1 ..... dry
J. W. Newton, McCulloch et al 1 ..... dry
Shore, McKenna 4 ..... dry
J. Wooldridge, McLester Oil Co. 13 .... dry
D. C. Wooldridge, McLester Oil Co. 19.. 50
Whiteside, McLester & Green 1 ..... dry
M. E. Fry, Magnolia Pet. Co. 8 ..... 6
Suttles, Midwest Exploration Co. 19 .... 20
Weedon, Micham 1 ..... dry
Smith, Morris 2 ..... dry
Westerman, Pandem Oil Corp. 10 ..... 5
Armstrong, Prairie Oil & Gas Co. 4 .... dry
J. H. Fry, Rex-Pyramid Oil Co. 4 ..... 975
Bourn, Roeser & Pendleton 1 ..... dry
Newton, Roxana Pet. Corp. 4 ..... 561
Whiteside, Roxana Pet. Corp. 3 ..... dry
Pugh, Quinn et al 1 ..... 30
Jones, Ratblott 1 ..... dry
Fry, Rex-Pyramid Oil Co. 6 ..... dry
J. P. Newton, Roxana Pet. Corp. 3 ..... 144
Walker, Sawyer et al 1 ..... dry
White estate, Sawyer et al 5 ..... dry
Hays, Selby Oil Co. 1 ..... dry
Hall, Shadbolt & Creighton 1 ..... dry
Byler, Shoup, Jr., 1 ..... 150
J. H. Fry, Sinclair Oil & Gas Co. 3 .... 1465
J. H. Fry, Sinclair Oil & Gas Co. 4 .... 1138
J. H. Fry, Sinclair Oil & Gas Co. 6 .... 842
J. H. Fry, Sinclair Oil & Gas Co. 8 .... 622
Martin, Sorrells et al 1 ..... dry
Hickman, The Texas Co. 12 ..... dry
Hickman, The Texas Co. 13 ..... 70
Hickman, The Texas Co. 15 ..... 15
Lowe, The Texas Co. 24 ..... 25
Pugh, The Texas Co. 5 ..... 150
Pugh, The Texas Co. 7 ..... 50
Pugh, The Texas Co. 8 ..... 25
Teston, Valley Oil Corp. 4 ..... 125
J. P. Newton, Wakefield et al 1 ..... 200
J. P. Newton, Wakefield et al 2 ..... 300
Shore, Wentz Oil Corp. 5 ..... 200
Keeler, Williamson 11 ..... 8
D. C. Wooldridge et al 7 ..... 20
J. P. Newton, Wilson et al 2 ..... 25

Wells completed ..... 79
Production ..... 16835
Dry ..... 31

**CALLAHAN COUNTY**

Boydston, Gibson & Johnson 1 ..... dry
Hutchinson, Gibson & Johnson 1 ..... dry
Hudson, Hudson heirs 1 ..... dry
Cunningham, Prairie Oil & Gas Co. 11. 8
Weeks, States Oil Corp. 1 ..... dry

Wells completed ..... 5
Production ..... 8
Dry ..... 4

**CLAY COUNTY**

Holloway, Lone Star Gas Co. 25 ..... dry
Waggoner, Lone Star Gas Co. 31 ..... dry
Waggoner, Stump & Co. 1 ..... 8
Waggoner, Stump & Co. 2 ..... dry

Wells completed ..... 4
Production ..... 8
Dry ..... 3

**COLEMAN COUNTY**

Dibrell, Burke-Greis Oil Co. et al 1-A.. dry
Green et al, Ehorn & Quinn 1 ..... dry
Morris, Magnolia Pet. Co. 17 ..... dry
Burk, Morrison & St. John 1 ..... dry
DeBusk, National Pet. Co. 1 ..... dry
Russell, Russell 1 ..... dry
Richardson, Schimmel 1 ..... dry
Wells, Van Eman et al 1 ..... dry
Smith, Whitemire 1 ..... dry

Wells completed ..... 9
Production ..... 0
Dry ..... 9

**COOKE COUNTY**

Dennis, American Ref. Co. 5 ..... 20
Dennis, American Ref. Co. 6 ..... 45
Kleiss, Camp & Heydrick & Oil Operators Trust 1 ..... 144
Marshall, Eggar et al ..... dry
Embry, Hughes Dev. Co. 1 ..... 20
Williams, Jeffers & Jeffers 1 ..... dry
Field, Kerper & Greer 1 ..... dry
Johnson, Magnolia Pet. Co. 1 ..... gas
Luke, Oil Operators Trust Co. 1 ..... 90
Brown & Blanton, F. E. Skinner 1 ..... dry

Wells completed ..... 10
Production ..... 319
Dry ..... 4

**EASTLAND COUNTY**

Cunningham, Applegate et al 2 ..... 5
Morgan, Independent Oil & Gas Co. 2.. 200
Thomas, Magnolia Pet. Co. 1 ..... 18
S. M. U., Meredith et al 1 ..... dry
Hightower, Panhandle Ref. Co. 25 ..... dry
Ray, Root et al 1 ..... dry
Hargus, Teatsworth et al 1 ..... 25
Hightower, The Texas Co. 10 ..... 2
Hightower, The Texas Co. 11 ..... 75
Compton, Vacuum Oil Co. 1 ..... dry

Wells completed ..... 10
Production ..... 325
Dry ..... 4

**JACK COUNTY**

C. K. Cullers, Buttram Pet. Co. 4 ..... 120
M. Cullers, Buttram Pet. Co. 1 ..... dry
Preston-C, Buttram Pet. Co. 7 ..... 40
Sampley, Buttram Pet. Co. 1 ..... 30
Bernhardt, Donohoo & Johnson 5 ..... dry
Riley, Seaboard Oil Co. 1 ..... dry
Henderson, Security Drilling Co. 1 ..... 20
Preston, Sinclair Oil & Gas Co. 1 ..... 30
Smith, White Bros. 1 ..... 8

Wells completed ..... 9
Production ..... 248
Dry ..... 3

**MONTAGUE COUNTY**

Yarborough estate, Alexander & Lyles 1 dry
Howard, Barnsdall Oil Co. 3 ..... 30
Rolls estate, Cato Oil Co. 7 ..... 45
Rolls estate, Cato Oil Co. 9 ..... 25
Rolls estate, Cato Oil Co. 10 ..... 35
Bouldin-A, Continental Oil Co. 14 ..... 25
Howard, Continental Oil Co. 12 ..... 48
Howard, Continental Oil Co. 20 ..... 17
Howard-A, Continental Oil Co. 15 ..... 37
Hurd-A, Continental Oil Co. 17 ..... 56
Howard-B, Continental Oil Co. 6 ..... 40
Howard-B, Continental Oil Co. 7 ..... 23
Maddox-A, Continental Oil Co. 10 ..... 34
Maddox-A, Continental Oil Co. 11 ..... 26
Maddox-A, Continental Oil Co. 12 ..... 40
Maddox-A, Continental Oil Co. 13 ..... 48
Maddox-A, Continental Oil Co. 14 ..... 26
Maddox-A, Continental Oil Co. 15 ..... 58
Maddox-B, Continental Oil Co. 10 ..... 60
Maddox-B, Continental Oil Co. 11 ..... 52
Rowland, Continental Oil Co. 11 ..... 22
Rowland-A, Continental Oil Co. 13 ..... 23
Rowland-B, Continental Oil Co. 8 ..... dry
Rowland-B, Continental Oil Co. 9 ..... dry
Rowland-B, Continental Oil Co. 10 ..... 26
Rowland-C, Continental Oil Co. 6 ..... dry
Salmon-A, Continental Oil Co. 1 ..... dry
Howard-C, F. H. E. Oil Co. 2 ..... 52
Howard-C, F. H. E. Oil Co. 3 ..... 25
Flint, Farmers Creek Oil & Gas Co. 1.. dry
Maddox, Fowler & Kahle 4 ..... 65
Howard-Dennis, Gulf Prod. Co. 2 ..... 32
Howard-Dennis, Gulf Prod. Co. 3 ..... 70
Howard-Dennis, Gulf Prod. Co. 4 ..... 25
J. W. Rowland, Gulf Prod. Co. 5 ..... 17
Howard, Humble Oil & Ref. Co. 2 ..... 20
Howard, Humble Oil & Ref. Co. 3 ..... 75
Jones, Humble Oil & Ref. Co. 2 ..... 25
Maddox, Humble Oil & Ref. Co. 13 ..... 40
Cunningham, McMan Oil & Gas Co. 1 dry
Bouldin, Olean Pet. Co. 2 ..... dry
Salmon, Perkins et al 2 ..... 20
Maddox-B, Pure Oil Co. 5 ..... 40
Rowland-B, Pure Oil Co. 6 ..... 94
Maddox-B, Pure Oil Co. 6 ..... 35
Rowland-B, Pure Oil Co. 7 ..... dry
Gist-B, The Texas Co. 4 ..... 40
Maddox-A, The Texas Co. 9 ..... 38
Maddox-D, The Texas Co. 5 ..... 75
Maddox-D, The Texas Co. 7 ..... 30
Martin, The Texas Co. 5 ..... 26

Wells completed ..... 51
Production ..... 1640
Dry ..... 9

**PALO PINTO COUNTY**

Hinkson, Terrell & Morrissey 1 ..... dry
Stuart, Texas Pacific Coal & Oil Co. 151 135

Wells completed ..... 2
Production ..... 135
Dry ..... 1

**SHACKELFORD COUNTY**

Davis, American Ref. Co. 2 ..... dry
Nail, Carter, Dev. Co. 1 ..... dry
Nail, Carter, Dev. Co. 7 ..... dry
McLemore, Duty 1 ..... dry
Davis, Hope Pet. Co. 1 ..... 70
Cook, Humble Oil & Ref. Co. 18 ..... 15
Moberly, Hyde & James 6 ..... 100
Davis, Independent Oil & Gas Co. 3 ..... 20
Myer, Lee & Dungee 2 ..... 40
Midkiff, Magnolia Pet. Co. 2 ..... dry
Moberly, Magnolia Pet. Co. 3 ..... dry
Moore, Milham Corp. 3 ..... 15
Simpson, Milham Corp. 2 ..... dry
Matthews, Overlees 5 ..... 5
Manley, Ramsey & Maxey 1 ..... dry
Cook-A-60, Roeser & Pendleton 21 ..... 30
Cook-A-60, Roeser & Pendleton 22 ..... 800
Cook-A-60, Roeser & Pendleton 23 ..... 30
Cook-A-60, Roeser & Pendleton 26 ..... dry
Cook-A-60, Roeser & Pendleton 28 ..... dry
Cook-A-60, Roeser & Pendleton 29 ..... 350
Cook-A-60, Roeser & Pendleton 30 ..... 800
Cook-A-60, Roeser & Pendleton 31 ..... 300
Cook-A-60, Roeser & Pendleton 34 ..... 35
Cook-A-60, Roeser & Pendleton 35 ..... 50
Cook-B-60, Roeser & Pendleton 27 ..... dry
Cook-B-60, Roeser & Pendleton 29 ..... dry
Cook-C-60, Roeser & Pendleton 5 ..... 40
Cook-C-60, Roeser & Pendleton 10 ..... 35
Cook-C-60, Roeser & Pendleton 11 ..... 30
Cook-C-60, Roeser & Pendleton 12 ..... 50
Cook-C-60, Roeser & Pendleton 13 ..... 30
Cook-C-60, Roeser & Pendleton 15 ..... 50
Cook-E-60, Roeser & Pendleton 4 ..... 50
Cook-A-85, Roeser & Pendleton 24 ..... 20
Cook-A-85, Roeser & Pendleton 26 ..... 40
Moberly-B-12, Roeser & Pendleton 2 .... 100
Moberly, Ross et al 1 ..... 25
Lones, Simms Oil Co. 1 ..... 64
Matthews, Tannehill Oil Co. 2 ..... 50
Moberly, Tannehill Oil Co. 9 ..... 40
Waters, Wallace 1 ..... gas
Matthews, White Eagle Oil & Ref. Co. 2 dry
Matthews, York & Delaney 1 ..... dry

Wells completed ..... 44
Production ..... 3264
Dry ..... 14
Gas ..... 1
Gas production ..... 4,000,000

**STEPHENS COUNTY**

Bradford, Barkley & Conway 2 ..... dry
Gardenshire, Christie Bros. 3 ..... dry
Cockrell, Humble Oil & Ref. Co. 1 ..... dry
Hamill, Humble Oil & Ref. Co. 1 ..... dry
Kirkland, Mid-Kansas Oil & Gas Co. 1.. 2
Cunningham, Mid-Tex Oil Co. 7 ..... 115
Hefley, Pearson et al 2 ..... 40
Cooper, States Oil Corp. 4 ..... gas
Pratt, Texas Fidelity Oil Co. 6 ..... 340
Pratt, Texas Fidelity Oil Co. 7 ..... gas
Binney, Texas Pacific Coal & Oil Co. 69 60
Webb, Urban et al 1 ..... dry

Wells completed ..... 12
Production ..... 559
Dry ..... 5
Gas ..... 2
Gas production ..... 13,000,000

**THROCKMORTON COUNTY**

Conger, Consolidated Oil Co., Larkin & White 2 ..... dry
M. K. Graham-A, Gulf Prod. Co. 1 ..... 368
Mathews, Hoofer Oil Corp. 2 ..... dry
Stubblefield, Humble Oil & Ref. Co. 3.. 169
Parrott, Red Bank Oil Co. 8 ..... dry
Graham-A, Reiter-Foster Oil Co. 1 ..... 14
Parrot, Reiter-Foster Oil Corp. 1 ..... dry
Reynolds Cattle Co., Texon Oil & Land Co. & Marland Oil Co. ..... dry

Wells completed ..... 8
Production ..... 551
Dry ..... 5

**WICHITA COUNTY**

Griffin, Bridwell & Heydrick et al 1 ... 140
Waggoner, Bridwell & Mayfield et al 2. 20
Ward & Todd, Bridwell & Heydrick 16. 30
Chapman, Chenault, Palmer & Burch 3 dry
Potter, Chenault, Palmer & Burch 3 ... 10
Ward & Todd, R. M. Clark et al 12 .... 40
Burnett-O, Continental Oil Co. ..... 15
Love, Continental Oil & Petroleum Prod. Co. 1 ..... dry
Overby, Cook & Reeder 3 ..... 15
Love, Cooper & McLaughlin 2 ..... 110
Moore et al, Craig & Wilson 1 ..... dry
Waggoner, Culbertson Co. 50 ..... 25
Burnett-Dale Oil Corp. 20 ..... 35
Waggoner, Eureka Prod. Co. 14 ..... 30
Ferguson, Fain, McGaha Oil Corp. 1 .. dry
Jennings, L. P. Hammon 5 ..... 90
Kemp & Kempner-G, Humble Oil & Ref. Co. 1 ..... dry
Waggoner-R, W. Hammon et al 9 ..... 5
Waggoner-B, W. Hammon et al 10 ..... dry
Burnett-B, Joe Howell 1 ..... dry
Jennings, J. C. Jennings 1 ..... 52
Jennings, J. C. Jennings 2 ..... dry
Burnett, Madison Oil & Gas Co. 18 ..... 45
Fassett, Magnolia Pet. Co. 7 ..... dry
Sec. 2 Oil Co. (Burnett), Magnolia Pet. Co. ..... dry
Heisermann, Magnolia Pet. Co. 8 ..... 5
Waggoner-A, Magnolia Pet. Co. 11 ..... 5
Rhodes et al, Martin et al 1 ..... dry
Rhodes, Martin et al 2 ..... dry
Burnett, W. M. Moore 2 ..... 18
Yarborough, O'Neil et al 2 ..... dry
Ferguson, Panhandle Ref. Co. 1 ..... dry
Riley Griffin, Panhandle Ref. Co. 6 ... dry
Ferguson, Petroleum Prod. Co. et al 1.. dry
"Shallow" Love-B, Petroleum Prod. Co. 3 ..... 20
"Shallow" Love-B, Petroleum Prod. Co. 4 ..... 30
Obenhaus, P. Sheldon 2 ..... 85
Billingsley, Simms Oil Co. ..... dry
Griffin, Staley, Wynne et al 2 ..... 75
Waggoner, The Texas Co. 320 ..... 52
Waggoner, The Texas Co. 321 ..... 35
State land, Turner-Hines Drilling Co. 3 dry
Collins, United Royalties Co. et al 1 .. dry
Foster & Allen, West et al 1 ..... dry
Mitchell-B, White Bros. 7 ..... dry

Wells completed ..... 45
Production ..... 987
Dry ..... 21

**WILBARGER COUNTY**

Ancell-J, Apple & Brandeberry 2 ..... 40
Ancell, J. Barnes 1 ..... 40
Fluhman, Fain-McGaha Oil Corp. et al 2 378
Fluhman, Fain-McGaha Oil Corp. 3 .... 117
Waggoner-E, Fain McGaha Oil Corp. et al 3 ..... 275
C. F. Blackman, Gulf Prod. Co. 1 ..... 287
Chauncey & Gambill, Humble Oil & Ref. Co. ..... dry
Waggoner-H, Humble Oil & Ref. Co. 12 60
Waggoner-H, Humble Oil & Ref. Co. 17 35
Waggoner-H, Humble Oil & Ref. Co. 18 20
Waggoner-M, Humble Oil & Ref. Co. 18 175
Waggoner-M, Humble Oil & Ref. Co. 19 145
Waggoner-N, Humble Oil & Ref. Co. 9. 32
Waggoner-R, Humble Oil & Ref. Co. 13 110
Fee, Magnolia Pet. Co. 75 ..... 20
Waggoner-L, Milham Corp. 18 ..... 90
Waggoner-L, Milham Corp. 20 ..... 30
Donges, Morris Bros. & Smith 1 ..... dry
Waggoner-A, Phillips Pet. Co. 14 ..... 10
Waggoner-L, Phillips Pet. Co. 4 ..... 240
Waggoner-R, Phillips Pet. Co. 3 ..... 112
Waggoner-T, Phillips Pet. Co. 6 ..... 200
Waggoner-Y, Phillips Pet. Co. 5 ..... 15
Waggoner-JJ, Phillips Pet. Co. 4 ..... 150
Waggoner-QQ, Phillips Pet. Co. 15 ..... 140
Waggoner-QQ, Phillips Pet. Co. 16 ..... 100
Waggoner-QQ, Phillips Pet. Co. 18 ..... 115
Waggoner-WW, Phillips Pet. Co. 5 ..... 150
Waggoner-A, Prairie Oil & Gas Co. 6.. 75
Waggoner-A, Waggoner Ref. Co. 6 ..... 100

Wells completed ..... 50
Production ..... 3361
Dry ..... 2

**YOUNG COUNTY**

Davis, Allday Oil Corp. 1 ..... dry
Marshall, Bashara et al 4 ..... 30
Peters, Cunningham et al 1 ..... dry
Wilson, Goldsmith et al 2 ..... dry
Stewart, Hill et al 1 ..... dry
Hamilton, Hines et al 1 ..... dry
Beardon, McChesney et al 2 ..... 80
Beardon, McChesney et al 3 ..... 12
Little, Magnolia Pet. Co. 15 ..... 35
Stewart, Moran et al 3 ..... 20
Farmer, Panhandle Ref. Co. 3 ..... dry
Boozer, Pitzer & West 2 ..... 15
Scott, Pitzer & West 1 ..... dry
Fayne et al, Ramsey et al 2 ..... 30
Prideaux, Roberts Oil Co. 2 ..... 20
Beardon, The Texas Co. 24 ..... 12
Benson, Tidal Oil Co. et al 10 ..... 265
Benson, Tidal Oil Co. et al 11 ..... dry

Wells completed ..... 18
Production ..... 484
Dry ..... 8

**ARCHER COUNTY**
**Wells Drilling**
(Shut-Down Wells Indicated by *)
**Rigs**

Griffin, Apple & Brandeberry 1*.
Turbeville-D, L. T. Burns 6.
Turbeville, Marland Oil Co. 19.
Turbeville-A, Simms Oil Co. & Burns 8.
Wilson, Stump et al 1.
Key, Christie & Maddox 1.
Oldham, Continental Oil Co. 17.
Seay, Continental Oil Co. et al 1.
Abercrombie & Taylor, Leath et al 1.
Ward, Underwood Drilling Co. et al 3, 4.
Lester, Whittiken et al 1.

**Wells Drilling**

Chilson, Arco Oil Co. 1.
Mangold, Elliott & Roxana Pet. Corp. 1.
Ferguson-A, Freeman Hampton Oil Corp. 21*.
H. L. Ward et al, Gulf Prod. Co. 3.
Jackson, Shappell Oil Co. 40, 41.
Turbeville, American Ref. Co. et al 11.
Wilson, Barnsdall Oil Co. 2.
Turbeville-D, L. T. Burns 4, 5, 7.
Goose, Continental Oil Co. 60.
Taylor, Dorian & Peterson 1.
Miller, Ferguson et al 1*.
Parrish, T. F. Hunter 4*.
Wilson, T. F. Hunter 4*.
White, Jetter & Anderson 1*.
Turbeville, Marland Oil Co. 17, 18.
Perkins et al-A, Marland Oil Co. & Perkins 1.
Turbeville-C, Petroleum Prod. Co. 3.
Lyles, Plains Prod. Co. 1.
Seals, Plains Prod. Co. 1.
Miller, Pois & Schultz 2*.
Wilson-C, Rines & Bailey 3.
Turbeville-A, Simms Oil Co. 16.
Turbeville, Simms & Consolidated 1.
Turbeville-A, Tidal Oil Co. 3.
Andrews, Ashcraft et al 1.
Abercrombie & Taylor-A, Bridwell & Heydrick 12.
Richardson, Continental Oil Co. 1.
Prideaux, Golding, Cochran & Cline 12*, 14.
Farmer, Harris et al 1.
Garvey, A. W. Johnston 2*.
Prideaux, Kell & Kruger 5*.
Wolf, Kruger et al 2, 3.
Lowe, Magnolia Pet. Co. 31.
Wilson, Manton et al 1.
Abercrombie & Taylor-A, Roxana Pet. Corp 16.
Lowe, Roxana Pet. Corp. 1.
Pace, Roxana Pet. Corp. 1.
Wolf, Roxana Pet. Corp. 1, 2.
Coody, Staley, Wynn & Kruger 1.
Love, The Texas Co. 1.
Neal, Wichita Prod. Co. 6*.
Prideaux, Wilson & Russell 5.
Rigs, 12; wells drilling, 49; total, 61.

**BROWN COUNTY**
**Rigs**

Windham, Brit 2.
Stone, Cranfill & Reynolds 1.
J. W. Newton, Empire Gas & Fuel Co. 1
White, Gibson Oil Co. 1.
Metts, Humble Oil & Ref. Co. 2.
Pugh, Humble Oil & Ref. Co. 1.
White, Root & Rhodes 1.
Mier, Simms Oil Co. 1.
J. P. Newton, Wakefield et al 3.
Martin, Spratt & Eads 1.

**Wells Drilling**

J. H. Fry, Amerada Pet. Corp. 17, 20, 21.
Henslee, Amerada Pet. Corp. 1.
Keelar, Anderson & Shults 1.
Kilgore Bros., Ann Belle Oil Co. 2*.
Metts, Barbara Oil Co. 2, 3, 4.
Willis, Barbara Oil Co. 3.
Dunn, Bedichek 1*.
Williams, Bowden et al 1.
Giddings, Bowers 1.
Stout, Bradstreet et al 7.
Robertson, Brands 1.
Jones, Burton et al 1*
Kennedy, Carter 1*.
Armstrong, Clark & Kimbell 1.
Corder, Claypool & Wells 1.
Arledge, J. S. Cosden 5, 6.
Williams, J. S. Cosden 5-A.
Shore, Forsythe et al 1.
J. P. Newton, Gillespie 8*, 10.
Perry, Gilman et al 2.
Teston, Gilman & McMurray 14*, 15*.
Phillips, Henderson & Pitts 1*.
Armstrong, Humble Oil & Ref. Co. 7, 8*.
J. H. Fry, Humble Oil & Ref. Co. 2, 3.
Hickman, Humble Oil & Ref. Co. 11.
Hodnett, Humble Oil & Ref. Co. 12, 4-B, 5-B, 7-B.
Metts, Humble Oil & Ref. Co. 1.
J. W. Newton, Humphrey Bros. 7.
Graham estate, Jarvis et al 1*.
M. E. Fry, Magnolia Pet. Co. 9.
Metts, Magnolia Pet. Co. 1, 2.
Chambers, Mahlstedt Oil Co. 1.
Leatherwood, McCarter Oil Co. 2*.
J. W. Newton, McGinley et al 1.
Foster, E. McKenna 17*.
Burris, Mexana Oil Co. 1*.
Prater, Midwest Exploration Co. 6*.
Keller, Mitchum 1.
Lane, O'Neill et al 1*.
Turner, Pandem Oil Corp. 1.
Westerman, Pandem Oil Corp. 11.
Hickman, Phillips Pet. Co. 3.
Prater, Phillips Pet. Co. 6.
Gaines, Prairie Oil & Gas Co. 1.

J. H. Fry, Rex-Pyramid Oil Co. 5, 7, 8, 10, 11.
Pugh, Root et al 1, 2.
Davis, Rosenfield et al 1.
Miller, Ross Drilling Co. 1.
J. P. Newton, Roxana Pet. Corp. 5, 6.
J. H. Fry, Sinclair Oil & Gas Co. 5, 7*, 9, 10, 11, 12, 13, 14.
Cross, Sorrels et al 1*.
White, Sorrels et al 1.
Byler, The Texas Co. 1.
Hickman, The Texas Co. 14, 16.
Lowe, The Texas Co. 9, 11, 13, 17, 19, 21, 23.
Pugh, The Texas Co. 9.
Stout, The Texas Co. 1.
Lee, Thomas & Reynolds 1.
Eads, Vaughn & Evans 1.
Keeler, Vondran et al 1.
Moore, Wallace et al 1*.
Shore, Wentz Oil Corp. 6*.
Newton, West & H-Y Oil Co. 22*.
D. C. Wooldridge, Williamson et al 8.
Davis, Alford Oil Co. 1.
McDaniel, Campbell & Rosenfield 1.
Brown, Christmas 1*.
Davis, Cranfill & Reynolds 1.
Whiteley, Fabor & Warren 1.
Starkey, Garrett & Hammon 1.
King, Hays 1*.
Humphrey, Loofbourrow 1.
Conway, Lloyd et al 1*.
Bull, McIntyre et al 1*.
Phillips, McLester et al 1.
Sheffield, Monroe Prod. Co. 1.
Greseckey, Nelson et al 1.
Schulze, Randall 1*.
Davis, Sorrels et al 1.
Rigs, 10; wells drilling, 112; total, 122.

**CALLAHAN COUNTY**
**Rigs**

Ferguson, Sanger Oil Co. 1.
Horn, Swovendale & Dill 1.
**Wells Drilling**
Bryant, Deener 1.
Ross, Dixie Drilling Co. 1*.
Johnson, Empire Gas & Fuel Co. 1*.
Alvord, Gibson & Johnson 1*.
Finley, Gibson & Johnson 1*.
Hickman, Humble Oil & Ref. Co. 1.
Irvin, Milham Corp. 1*.
Barr, Milham Corp. 1.
Warren, Milham Corp. 1.
Moore, Mission Drilling Co. 1*.
Seale estate, Mississippi Valley Oil Co. 1*.
Boydston, Moore & Snebold 1.
Walker & Caldwell, Moore et al 1-A.
Rumph, Murchison & Fain 1*.
Hays, Oklavania Oil Co. 1*.
T. E. Baum, Prairie Oil & Gas Co. 1.
E. E. Baum, Prairie Oil & Gas Co. 2.
Nebb, Prairie Oil & Gas Co. 1.
Hutchinson, Rinehart et al 1.
Cutbirth, Richardson Bros. 1.
Young, Roeser & Pendleton 1*.
McWhorter, Seaboard Oil & Gas Co. 1.
Hall, Shadbolt & Creighton 1.
Crutchfield, Shaw et al 1.
Webb, Wakefield et al 1*.
Rigs, 2; wells drillin, 25; total, 27.

**COLEMAN COUNTY**
**Wells Drilling**

Strozier, Broderick & Calvert 1.
Dibrell, Burke-Greis Oil Co. 5*.
Parker, Carter 1*.
Morris, Chestnut & Smith 1.
Crawford, English et al 1.
Harris, English et al 1.
Casey, Gibson & Johnson 1.
Newsom, Gracey Bros. 1.
Franklin, McPhail et al 1*.
Gray, Magnolia Pet. Co. 1.
Halbert, Milham Corp. 1.
Andrews, Moore & Fuhrman 1.
Sealy & Smith, Roth & Faurot 1.
Gray, Schermerhorn Oil Co. et al 2.
Chesley, Sebastian 1.
Reaves, Taylor et al 1*.
Sealy & Smith, Texas Oil & Land & Marland Oil Co. 1*.
Thate, Urban 1*.
Overall, Chaney et al 3*.
Davis, Evans et al 1.
Pfluger, Jewell & Sill 1*.
Brown, Monroe Prod. Co. 1*.
Johnson, Newby et al 1*.
McAdams, Roden et al 1*.
Kingsberry, Smythe & Liverman 1.
Fletcher, Van Eman et al*.
Wells, Van Eman et al 2*.
Witkowski, World Oil Corp. 1.
Rigs, 0; wells drilling, 28; total, 28.

**COOKE COUNTY**
**Rigs**

Luke, Oil Operators Trust Co. 3.
Jagelky, F. P. Zock 1.
**Wells Drilling**
Walker, Amerada Pet. Corp. 1.
Dennis, American Refining Co. 7.
Lester, Big Indian Oil & Dev. Co. 1*.
Kleiss, Comp-Heydrick & Oil Operators Trust Co. 2.
Hemphill, Homer Chapman 1*.
Montgomery, Chapman & Lanier 1*.
Harris, Gist & Graddy 1*.
Evans, Green et al 1*.
Wilson, Hoffer Oil Corp. 1*.
Cox, Houseman et al 1*.
Dennis, Kewanee Oil & Gas Co. (formerly Hooser Oil Co.) 17, 18.
Johnson, Magnolia Pet. Co. 1*.
Bayer, Malaree Oil Co. 1.
Ludeman, Scientific Oil Corp. 1*.
Houston, Simpson et al 1.
Vogal, Skinner et al 1.
Mitchell, Sowell Bros. 1*.
Koelser, Stroube & Stroube 1.
Grotte, Sun Oil Co. 1.
Kitchens, Vacuum Oil Co. & Big Indian Oil & Dev. Co. 1*.
Rigs, 2; wells drilling, 21; total, 23.

**EASTLAND COUNTY**
**Rigs**

Parrish, Gholson et al 1.
B. L. Duffer, Gulf Prod. Co. 3, 4, 6.
Hargus, Lewis et al 1.
Lyerla, Simms Oil Co. 1.
Ables, Amerada Pet. Corp. 1.
Massman, Chestnut & Smith 1.
Thomas, Mag. Pet. Co. 2.
McAllister, M. T. C. O. Co. 1.
Thorp, Root et al 1.
**Wells Drilling**
Carter, Eastland Oil Co. 1*.
Capers, Garrett & Moore 1.
Jones, Green Prod Co. 1.
B. L. Duffer, Gulf Prod. Co. 1, 2.
Johnson, Lewis et al 1.
Lyerla, Lewis & Moore 1.
Williamson, Mays et al 1.
Hightower, Panhandle Ref. Co. 26.
Norwood, T. P. Coal & Oil Co. 33.
Grove, Adams et al 2.
Doppler, Arnold et al 2.
Luse, Associated Pet. Co. 1.
Scott, Bryant et al 1*.
Jeffers, Burke-Greis Oil Co. 1.
Bond, Cranfill & Reynolds 1.
Spencer, Cranfill & Reynolds 1.
Morgan, Indpt. Oil & Gas Co. 2.
Snider, Indpt. Oil & Gas Co. 2.
Harrell, Livingston & Willman 1.
Hazel, Livingston et al 1.
Johnson, McBride 1*.
Thomas, Mag. Pet. Co.
Thorp, McLester Oil Co. et al 1.
Watson, Root et al 1.
Hines, Roxana Pet. Corp 1.
White, Rumbaugh & Thompson 1*.
Higginbotham, T. P. Coal & Oil Co. 1.
McCall, T. P. Coal & Oil Co. 1.
Ramsower, West Adams Oil Co. 2.
Rigs, 11; wells drilling, 30; total, 41.

**JACK COUNTY**
**Wells Drilling**

Jackson, Seaboard Oil & Gas Co. 1.
C. K. Cullers, Buttram Pet. Co. 5*.
M. Cullers, Buttram Pet. Co. 2.
Gaskin, Buttram Pet. Co. 1.
Kuykendall, Buttram Pet. Co. 1.
McClure, Buttram Pet. Co. 1.
Preston-A, Buttram Pet. Co. 2.
Preston-C, Buttram Pet. Co. 6.
Williams Brothers, Crump & Conklin 1.
Thomason, Dingee et al 1.
Gray, Rochelle et al 1*.
Nash, Schermerhorn Oil Co. 1.
C. K. Cullers, Seaboard Oil & Gas Co. 4, 5.
Henderson, Security Drlg. Co. 1*.
Rigs, 0; wells drilling, 15; total, 15.

**MONTAGUE COUNTY**
**Rigs**

Howard et al, Barnsdall Oil Co. 4.
Rolls Est., Cato Oil Co. 11.
Bouldon, Continental Oil Co. 2.
Maddox, Gracey & Kahle 5.
E. J. Bouldin-A, Gulf Prod Co. 1.
M. Crownover, Gulf Prod Co. 1.
Nivens, Holmes et al 1.
**Wells Drilling**
Howard et al, Cato Oil Co. 2.
Rolls Est., Cato Oil Co. 12.
Rolling, Comet Pet. Co. 1.
Hinton, Continental Oil Co. 2*.
Howard et al, Continental Oil Co. 18, 22, 23, 24.
Jones, Continental Oil Co. 8.
Maddox-A, Continental Oil Co. 16.
Maddox-C, Continental Oil Co. 1*.
York, et al, Continental Oil Co. 1.
Maddox, Empire Gas & Fuel Co. 2.
Howard-Dennis, Gulf Prod. Co. 5, 6, 7, 8.
W. W. Jones-B, Gulf Prod. Co. 2.
Jones, Humble Oil & Ref. Co. 3.
Salmon et al, Perkins et al 3.
Crow et al, Pure Oil Co. 2.
Keck, Pure Oil Co. 1*.
Maddox-D, Pure Oil Co. 4.
Maddox-C, Pure Oil Co. 6.
Howard et al-E, The Texas Company 1*.
Field, Burns & Farris 1*.
Bybee, Chapman et al 1*.
Adams, Dale Oil Corp. 1*.
Williams, Dickey et al 1*.
Wilson, Green et al 1*.
Rice, Richardson Brothers 1.
Barcley, Washington Oil Corp. 1*.
Tinney et al, Yates & Cumley 1*.
Rigs, 7; wells drilling, 33; total, 40.

**SHACKELFORD COUNTY**
**Rigs**

Reynolds, Hope Oil & Gas Co. 13, 17, 1-B.
Dyer, Midwest Exploration Co. 1.
Brooks, Phillips Pet. Co. 4.
Cook, Roeser & Pendleton & Marland Oil Co. (Sec. 60) 41-A.
Cook, Roeser & Pendleton (Sec. 60) 28-B.
Dyer, So. Pet. Exploration Co. 3, 4.
Gorsuch, White Eagle Oil & Ref. Co. 1.
**Wells Drilling**
Cook, Amerada Pet. Corp. 4.
Davis, J. S. Cosden 1.
Poindexter, Empire Gas & Fuel Co. 1.
Matthews, Engle Brothers 1-A.
Hill, Godfrey Oil Co. 1.
Goolwin, Gwinnup et al 1-79*.
Poindexter, Gwinnup et al 1-59, 1-61.
Herron, Hadley 1.
Davis, Hope Oil & Gas Co. 7, 8, 9.
Reynolds, Hope Oil & Gas Co. 15, 16.
Bernstein, A. J. Hughes et al 1.
Cook, Humble Oil & Ref. Co. 18, 19.
King, Humble Oil & Ref. Co. 2.
Moberly, Hyde & James 7.
Moberly, Mag. Pet. Co. 4.
English, Midwest Exploration Co. 1.
Fukusshina, Milham Corp. 1.
Moore, Milham Corp. 4, 5.
Sedwick, Milham Corp. 3, 5.
Manley, Mississippi Valley Oil Co. 1*.
Calvert, Moore 1.
Davis, Morton et al 2.
Smalley, Overlees 1.
Ackers, Pettitt et al 1*.
Brooks, Phillips Pet. Co. 3.
Compton, Phillips Pet. Co. 1.
Herron, Ramsey & Maxey Oil Co. 1*.
Myer, Republic Prod. Co. 1.
Cook, Roeser & Pendleton & Marland Oil Co. (Sec. 60) 32-A, 36-A, 37-A, 38-A, 39-A, 40-A, 42-A, 14-C, 16-C, 17-C, 5-F, 1-G.
Cook, Roeser & Pendleton & Marland Oil Co. (Sec. 85) 25-A, 27-A.
Moberly, Roeser & Pendleton & Marland Oil Co. (Sec. 13) 12-A, 13-A, 14-A, 15-A.
Moberly, Roeser & Pendleton (Sec. 12) 3-B, 4-B.
Nail, Roeser & Pendleton (Sec. 154) 1-A.
Reynolds, Roeser & Pendleton (Sec. 46) 1.
Scott, Roeser & Pendleton (Sec. 172) 1.
Hagan, Shroyer & Pattison 1*.
Nail, Sinclair Oil & Gas Co. 1, 2, 6.
Swenson, Smith et al 1.
Goodwin, Stalker Oil Co. 1.
Moberly, The Texas Company 1*.
Goodwin, Thurman & Maxwell 1.
Waters, Wallace 1.
Proctor, Wentz Oil Corp. 4*, 5.
Hill, World Oil Corp 1*.
Rigs, 10; wells drilling, 70; total, 80.

**STEPHENS COUNTY**
**Rigs**

Keel, Pender Prod. Co. 6.
Glenn, Humble Oil & Ref Co. 5.
Groseclose, Lyman 1.
Pratt, Texas Fidelity Oil Co. 8.
**Wells Drilling**
Magers, Hart Oil Corp 1*.
J. W. Hill, Mid-Kansas Oil & Gas Co. 20.
S. R. Hill, Acct. 1, Mid-Kan. O. & G. Co. 6.
Cobb, Swensondale 2.
Smith, Eldson 1.
Stephens, Goodwin Drlg. Co. 1*.
Chesley, Meredith & Thomas 1.
Thorp, Milham Corp 1.
Fambrough, Morton et al 1*.
Taylor, Phillips Pet. Co. 1.
Parks, The Texas Company 44-A.
Pierce, The Texas Company 14.
A. D. Hohertz, Tex. Pac. C. & O. Co. 26.
Walker, Tripplehorn Brothers 5*.
Rigs, 4; wells drilling, 14; total, 18.

**THROCKMORTON COUNTY**
**Rigs**

McNutt, Pandem Oil Corp. 1.
Tuttle, Red Bank Oil Co. 1.
**Wells Drilling**
Buchanan, Associated Pet. Co. 1*.
Travis County school land, Cranfill & Reynolds, 1*.
Graham, Falls Prod. Co. 1.
M. K. Graham-A, Gulf Prod. Co. 2.
Graham, Humble Oil & Ref. Co. 2.
Stubblefield, Humble Oil & Ref. Co. 3.
Graham, Mag. Pet. Co. 1.
Cole, Red Bank Oil Co. 1.
Parrott, Red Bank Oil Co. 4.
Elliott, Reiter Foster Oil Co. 2*.
Graham, Reiter Foster Oil Co. 1, 2.
Graham-A, Reiter Foster Oil Co. 2.
Lee, Reiter Foster Oil Co. 1.
Graham, The Texas Company 1.
Rogers, Woolems et al 1.
Reynolds Cat Co., M. R. Brann 1*.
Thomas, Cranfill & Reynolds 1*.
Matthews, Humble Oil & Ref. Co. 1.
Matthews-E, Moore et al 1.
Matthews, M. H. Overlees 2.
Rigs, 2; wells drilling, 21; total, 23.

**WICHITA COUNTY**
**Rigs**

Waggoner, Culbertson Co. 52.
Love, O'Donohoe & Gates 1.
**Wells Drilling**
Michna, Barney Cockburn 2.
Sands, Cannon & Smith 1.
Chapman, Chenault, Palmer & Burch 4.
Beach, Continental Oil Co. & Mag. Pet. Co. 1-A*.
G. Jennings, Gulf Prod. Co. 18.
G. Jennings-A, Gulf Prod. Co. 20.
C. F. Ancell et al, Gulf Prod. Co. 1.
H. S. Griffin-C, Gulf Prod. Co. 4.
Reilly, Mag. Pet. Co. 132.
Staley Beach, Mag. Pet. Co. 44.
Proctor, Proctor Oil Co. 1*.
Griffin, Bridwell & Heydrick et al 2.
Waggoner, Bridwell & Mayfield 3.
Kemp & Kempner, British American Oil Prod. Co. et al 1.
Kemp & Kempner, E. S. Carey 1.
Waggoner, C. H. Clark et al 1*.
Ward & Todd, R. R. Clark et al 13.
Burnett-E, Continental Oil Co. 13.
Munger, Continental Oil Co. & L. P. Hammond 1.
Throckmorton, R. Cook 3*.
Love, Cooper & McLaughlin 3.
Waggoner, Culbertson Co. 51.
Burnett, Dale Oil Corp. 21.
Ferguson, Fain-McGaha Oil Corp 2.
Waggoner-B, Hammon et al 11.
Mitchell-B, J. W. Hooser 7.
Munger-A, Humble Oil & Ref. Co. 1.
Van Horn, Koll-Tex Oil Corp 1.
Burnett, Madison Oil & Gas Co. 19.
Lute Ancell, Mag. Pet. Co. 1.
Honaker, Mag. Pet. Co. 16, 73.
Obenhaus, Mag. Pet. Co. 1.
Ramming-B, Mag. Pet. Co. 18, 24.
R. Ramming, Mag. Pet. Co. 1.
Burnett-E, W. M. Moore 1.
Hamilton, O'Neil et al 1.
Yarborough, O'Neil et al 3.
Griffin 60 ac., Panhandle Ref Co. 2, 3.
Riley Griffin, Panhandle Ref. Co. 6.
Love-B, (Deep) Pet. Prod. Co. 3.
Love-B (Shallow) Pet. Prod. Co. 5.
Waggoner, Pois & Fine et al 1*.
Mertens, Ramming & Saunders 2*.
Waggoner-C, Rio Bravo Oil Co. 1.
Nance, Ryan Pet. Co. 89*, 90.
Honaker, C. P. Sheldon 1.
Frankl et al-B, Shaldon et al 1.
Waggoner, Simms Oil Co. 1.
Griffin, Staley, Wynne et al 3.
Denny, Sun Oil Co. 1.
Stringer, The Texas Company 87*.
State land, Turner Hines Drlg. Co. 4.
Burnett, C. W. Wallace 1.
Rigs, 2; wells drilling, 57; total, 59.

**WILBARGER COUNTY**
**Rigs**

Waggoner-F, Fain & McGaha et al 1.
Waggoner-B, Milham Corp. 12.
Waggoner-A, Phillips Pet. Co. 15.
Waggoner-Q, Phillips Pet. Co. 7.
Waggoner-T, Phillips Pet. Co. 8.
Wagoner-JJ, Phillips Pet. Co. 5.
Waggoner-NN, Phillips Pet. Co. 12, 14, 15.
Waggoner-PP, Phillips Pet. Co. 3.
Waggoner-QQ, Phillips Pet. Co. 13.
**Wells Drilling**
Seigler Waggoner, Atlantic Oil Prod Co. 5.
Streit, Barkley & Meadows 1.
Ancell, J. Barnes 1.
Fluhman, Fain-McGaha et al 4, 5, 6.
Waggoner-E, Fain-McGaha et al 4.
C. F. Blackman, Gulf Prod Co. 2.
T. J. Milner, Gulf Prod. Co. 1, 2.
Chauncy & Gambill, Humble Oil & Ref. Co. 1.
Waggoner-H, Humble Oil & Ref. Co. 14, 19.
Waggoner-L, Humble Oil & Ref. Co. 2*.
Waggoner-M, Humble Oil & Ref. Co. 20.
Waggoner-N, Humble Oil & Ref. Co. 8.
Waggoner-O, Humble Oil & Ref. Co. 14.
Waggoner-Sec. 60, Kelly et al 1*.
H. & T. C. fee, Mag. Pet. Co. 76.
Piper, Mag. Pet. Co.
Minnie Waggoner, Mag. Pet. Co. 1.
Waggoner-B, Milham Corp. 8, 9, 11.
Waggoner-C, Milham Corp. 1*.
Waggoner-L, Milham Corp. 21.
Waggoner-F, Phillips Pet. Co. 11.
Waggoner-H, Phillips Pet. Co. 10.
Waggoner-I, Phillips Pet. Co. 6.
Waggoner-L, Phillips Pet. Co. 4.
Waggoner-O, Phillips Pet. Co. 1.
Waggoner-R, Phillips Pet. Co. 4.
Waggoner-T, Phillips Pet. Co. 8.
Waggoner-X, Phillips Pet. Co. 1.
Waggoner-Z, Phillips Pet. Co. 1.
Waggoner-CC, Phillips Pet. Co. 6-A.
Waggoner-II, Phillips Pet. Co. 1, 2.
Waggoner-JJ, Phillips Pet. Co. 4.
Waggoner-NN, Phillips Pet. Co. 13, 16.
Waggoner-QQ, Phillips Pet. Co. 2, 12, 17, 19.
Waggoner-TT, Phillips Pet. Co. 1.
Waggoner-WW, Phillips Pet. Co. 6.
Waggoner, Phillips Pet. Co. et al 1*.
Waggoner-B, Prairie Oil & Gas Co. 1*.
Kemp et al, Quincy Oil Co. 2*.
Milner, Roxana Pet. Corp. 1.
Waggoner-O, Roxana Pet. Corp 3.
Waggoner, C. L. Sloan 2.
Waggoner, Smith & Brody 1*.
Graf-X, The Texas Company et al 1.
Waggoner-A, Waggoner Ref. Co. 7.
Zipperle, Weir et al 2*.
Woodard, Wichtex Oil Co. 1*.
Rigs, 11; wells drilling, 58; total, 69.

**YOUNG COUNTY**
**Rigs**

Bryan, Lindsey Drlg. Co. et al 1.
Donnell, Painter et al 1.
McCluskey, Panhandle Ref. Co. 20.
Burnett, Shonquist Drlg. Co. 1.
**Wells Drilling**
Gragg, Boller et al 1*.
Hawkins, Cooper & Wolf 1.
Mothes, Hine et al 2.
Bloodworth, Mag. Pet. Co. 1.
Little et al, Mag. Pet. Co. 16.
Graham, Roberts Oil Corp. 1.
Stewart, The Texas Company 5.
Ford, Atkinson & Sandefer 4*.
Hinson, Christie Brothers 1.
McCluskey, Conner et al 4.
Mathis, Coones & Hotchkiss 1.
Jones, J. S. Cosden 1.
Griffin, Humphreys Corp. 1-B*.
Graham, Lindsey Drlg. Co. 1*.
Donnell, Liner Drlg. Co. 1*.
Fawks, Nash Windfohr & Phillips Pet. Co. 1.
McCluskey, Panhandle Ref. Co. 7, 17.
Daws, Pardee & Thompson 1.
Graham, Pemeta Oil Co. 2.
Scott, Pemeta Oil Co. 1*.
Boozer, Pitzer & West 2.
Mitchell, Pitzer & West 1.
Payne et al, Ramsey et al 2.
Stovall, Ruthada Oil Co. 3.
Thompson, Schermerhorn Oil Co. 1.
Graham, Seaboard Oil & Gas Co. 3.
Ragland, Seaboard Oil & Gas Co. & Nash & Windfohr 1.
Fee, E. C. Stovall 5.
Moore, Transcontinental Oil Co. 1*.
Rigs, 4; wells drilling, 31; total, 35.

**MISCELLANEOUS NORTH TEXAS**
**CLAY COUNTY**
(Shutdown wells indicated by *)
**Wells Drilling**

Stanfield et al, Bridwell & Heydrick 1*.
Douglas, Caldwell & Culbertson 1.
Johnson, Cobe Oil & Gas Co. 1*.
Sonzenbacker, O. H. Foster 1*.
Inman-A, Howard Pet. Co. et al 2.
Cozart, Seaburry et al 1.
Dean, H. C. Dean 1*.
Lockridge, Lone Star Gas Co. 6.
**COLLIN COUNTY**
**Wells Drilling**
Watkins, Verona Prod. Co. 1*.
**COMANCHE COUNTY**
**Wells Drilling**
Barnes, Humphrey Brothers 1*.
Miers, Kirk & Brewer 1*.
Braswell, Moore 1*.
Chapman, Sudderath et al 1*.
**DENTON COUNTY**
**Rigs**
Wright, McMahan & Daniels 1.
Hughes, Rondeau et al 1.
**Wells Drilling**
Fortemberry, Gainesville Synd. 1*.
Trietsch, Hudson Brothers 1*.
Waide, Jones & Eubank Inc. 1*.
Hampton, Moore & Garrett 1*.
Atkins, Rondeau & Sanford 1*.
**ERATH COUNTY**
**Wells Drilling**
Barton, Gillett 1*.
Finch, Nelson Oil Synd. 2*.
**FANNIN COUNTY**
**Wells Drilling**
Moore, Erin Prod. Co. 1*.
**FOARD COUNTY**
**Wells Drilling**
McAdams, Humble Oil & Ref. Co. & Navarro Oil Co. 1.
**HARDEMAN COUNTY**
**Wells Drilling**
Ayres, Murchison Oil Co. 1.
**HASKELL COUNTY**
**Wells Drilling**
Ballard, Kouri et al 3.
L. & C. Reynolds, Moody Oil Corp. 1.
Hughes, Ramsey & Maxey 1.
Colbert, Weart & York 1*.
**KNOX COUNTY**
**Rigs**
Big 4, Deep Rock Oil Co. 1.
**Wells Drilling**
Jones, Deep Rock Oil Co. 1.
Beavers, Deep Rock Oil Co. 1.
**MCCULLOCH COUNTY**
**Wells Drilling**
Rice, Gibson Oil Corp. 1*.
Smith, McClung et al 1*.
**PALO PINTO COUNTY**
**Wells Drilling**
Hart, Dixie Drlg. Co. 1*.
Seaman, Dixie Drilling Co. 1*.
Stuart, Moore & Snebold 8.
Rasmussen, Pender Prod. Co. 2*.
Slemmons, Pender Prod Co. 3.
**PARKER COUNTY**
**Wells Drilling**
Stickford, Coffin et al 1*.
Stickford, Woold Hats Co. 1.
Rigs, 3; wells drilling, 38; total, 41.

**WEST TEXAS COMPLETIONS**
**February, 1927**
**CRANE COUNTY**

Collett (Univ.), Eastland Oil Co. 1....1814
State-Lasseter, Gulf Prod. Co. 2.....2880
Crier-McElroy-A, Gulf Prod. Co. 2.....1320
Taylor, Independent Oil & Gas Co. 73.. 500
Hampton, Llano Oil Co. 1..... dry
O'Keefe, Magnolia Pet. Co. 3..... 757
Cowden, Marland Oil Co. 2-A..... 10

Hughes, Marland Oil Co. 3-D ..... 119
University, Prairie Oil & Gas Co. 3... 115
University, Prairie Oil & Gas Co. 4.... 30
Hughes, Simms Oil Co. 1 ..... dry
University, Simms and Atlantic 2.....8000
King, The Texas Company 11 ..... 54
King, The Texas Company 18 ..... 82
J. T. McElroy, Gulf Prod. Co. 5 .....2620

Wells completed ..... 15
Production ..... 18301
Dry ..... 2

**CROCKETT COUNTY**

Harris, Cranfill Bros. 1 ..... dry

Well completed ..... 1
Production ..... 0
Dry ..... 1

**ECTOR COUNTY**

J. D. Slator, Exploration Co. 1 ..... dry

Well completed ..... 1
Production ..... 0
Dry ..... 1

**HOWARD COUNTY**

Mary Chalk, Magnolia Pet. Co. 2 ..... 40
Chalk, Magnolia Pet. Co. 4 ..... 40
Chalk, Magnolia Pet. Co. 6-A ..... 61
Sarah Hyman, Magnolia Pet. Co. 1 ..... 30
Otis Chalk, Marland Oil Co. 8 ..... 69
Chalk, Marland Oil Co. 2-A ..... 43
H. R. Clay, Marland Oil Co. 1 ..... 233

Wells completed ..... 7
Production ..... 566
Dry ..... 0

**JONES COUNTY**

Mrs. J. V. Wright, Gibson & Johnson 1 dry
Mason, Marland Oil Co. 3 .....1800
Thornton, Midwest Explo. Co. 2..... 500

Wells completed ..... 3
Production .....2300
Dry ..... 1

**MIDLAND COUNTY**

Jones, Agress et al 1 ..... dry

**MITCHELL COUNTY**

W. L. Foster, Lse. 1, California Co. 2... 166
Handley, California Co. 2 ..... 82
A. L. Miller, Lse. 1, California Co. 6... 75
H. C. Miller, Lse. 4, California Co. 8.... 70
Pettifile, Lse. 1, California Co. 3..... 150
C. M. Adams, Magnolia Pet. Co. 7 ..... 30
Mary Foster, Magnolia Pet. Co. 2 ..... 40
Mary Foster, Magnolia Pet. Co. 3..... 150

Wells completed ..... 8
Production ..... 763
Dry ..... 0

**REAGAN COUNTY**

University, Big Lake Oil Co. 80 ..... 800
University, Big Lake Oil Co. 88 ..... 150
University, Big Lake Oil Co. 93 ..... 180
University, Big Lake Oil Co. 104 ..... 131
University, Big Lake Oil Co. 106..... 80
University, California Co. 3 ..... dry
University, Camp et al 1 ..... dry
Sawyer, Moody Oil Corp. 1 ..... dry
University Gr. 1, Texon Oil & Land 64 175
University Gr. 1, Texon Oil & Land Co. 65 375

Wells completed ..... 10
Production .....1891
Dry ..... 3

**RUNNELS COUNTY**

Fowler, Red Bank Oil Corp. 1..... dry
Bruce, F. P. Zoch et al 1 ..... dry

Wells completed ..... 2
Production ..... 0
Dry ..... 2

**TERRELL COUNTY**

Scott, Sun Oil Co. 1 ..... dry

Well completed 1..... 1
Production ..... 0
Dry ..... 1

**UPTON COUNTY**

Burleson, Dixie Oil Co. 14 ..... 40
Burleson, Dixie Oil Co. 15 .....1008
Burleson, Dixie Oil Co. 16 ..... 200
Burleson, Dixie Oil Co. 17 .....2000
M. L. Baker-B, Tr. A, Gulf Prod. Co. 2.. 172
J. F. Lane-C, Gulf Prod. Co. 1 ..... 225
E. S. Hughes, Gulf Prod. Co. 2 ..... 140
E. S. Hughes, Gulf Prod. Co. 3 ..... 150
E. S. Hughes, Gulf Prod. Co. 4 ..... 222
B. H. Estep, Gulf Prod. Co. 1 ..... 57
B. H. Estep, Gulf Prod. Co. 2 ..... 72
J. T. McElroy-C, Gulf Prod. Co. 2..... dry
Burleson, Humble Oil & Ref. Co. 5..... dry
Ricker, Humble Oil & Ref. Co. 2 ..... 60
Wooley, Independent Oil & Gas Co. 1... 10
Baker, Marland Oil Co. 1-A ..... 100
Gibbs, Marland Oil Co. 1 ..... dry
Powell, Marland Oil Co. 2 ..... 120
Powell, Marland Oil Co. 4 ..... 140
Shirley, Marland Oil Co. 3 ..... 168
Shirley, Marland Oil Co. 4 ..... 32
Burleson, Marland Oil Co. 1-B ..... 37
Lane, Prairie Oil & Gas Co. 1 .....1245
Lane, Prairie Oil & Gas Co. 2 .....1550
Chaney, Rio Grande Oil Co. 1 ..... 94
Bowen, Roxana Pet. Corp. 6 ..... 748
Bowen, Roxana Pet. Corp. 7 ..... 206
Estep, Roxana Pet. Corp. 7 ..... dry
Hughes, Roxana Pet. Corp. 5 ..... 100
Hughes, Roxana Pet. Corp. 10 ..... 75
Baker, Sun Oil Co. 2 ..... 130
Burleson, Sun Oil Co. 7 ..... 100
King, The Texas Co. 14 ..... 20
King, The Texas Co. 16 ..... 215
King, The Texas Co. 17 ..... 150
John Lane, Texas Pacific Coal & Oil Co. 1-A .....2315
Sherk, Wentz Oil Corp. 3 ..... dry

Wells completed ..... 37
Production .....11901
Dry ..... 5

**WEST TEXAS DRILLING**

**CRANE COUNTY**

**Rigs**

University, Church & Fields 1.
University, Carl Cromwell & Jones 1.
University, Eastland Oil & Collett 2, 4, 8.
University, Humble Oil & Ref. 3, 4, 5, 6, 7.
O'Keefe-University, Mag. Pet. 6.
State-Lasseter, Mag. Pet. 3.
State-Lasseter, Gulf Prod. 5, 6, 7.
University-Hardwick, Mag. Pet. 2, 3, 4.
Cowden Brothers, McCamey & Zoch 1.
State-Lasseter, Prairie O. & G. 1.
University, Simms Oil & Atlantic Oil Prod. 3, 4, 5, 1-C, 2-C.
University, Tidal Oil 2-F, 3-F.

**Wells Drilling**

University, Church & Fields 1.
University, Eastland Oil & Collett 1.
University, Humble Oil & Ref. 1, 2.
State-Lasseter, Gulf Prod 3, 4.
W. N. Waddell, Gulf Prod. 1.
Crier-McElroy, Gulf Prod. 5.
Crier-McElroy-A, Gulf Prod. 8.
J. T. McElroy, Gulf Prod. 6, 7.
J. T. McElroy-B, Gulf Prod. 1.
O'Keefe-University, Mag. Pet. 3, 4, 5.
State-Lasseter, Mag. Pet. 2.
University, Mag. Pet. et al 4.
Hughes, Marland Oil 2-B, 4-C*, 6-D.
Keith, Marland Oil & Zoch 3.
Collett, Prairie Oil & Gas 1.
University, Prairie O. & G. 4, 5, 6.
University, Simms Oil & Atlantic Oil Prod. 1-B.
Brookfield, Ben D. Simon et al 1.
University Stidham & Thrasher 1.
Cowden, The Texas Company 1*.
University, Tidal Oil 1-E, 1-F.
Cowden, Zweifel et al 1.
Rigs, 27; wells drilling, 33; total, 60.

**CROCKETT COUNTY**

**Wells Drilling**

Couch, Anchor Oil 1.
P. C. Coates, V. T. Bolin 1.
University, George A. Henshaw Jr. 1.
Powell, J. K. Hughes Dev. 2-B.
Shannon, Mag. Pet. 2.
University, William Shaffer et al 1*.
Pierce, W. W. Donnelly et al 1.
Schneeman, World Oil 1.
Shannon, J. D. Young and Carl Cromwell 1.
University, Young & Cromwell 1*.
Rigs, 0; wells drilling, 10; total, 10.

**HOWARD COUNTY**

**Rigs**

H. R. Clay, Dixie Oil 1.
Kelly Chalk, Mag. Pet. 1.
Sloan Chalk, Mag. Pet. 1.
Otis Chalk, Marland Oil 1-E.
H. R. Clay, Marland Oil 2, 3, 1-C, 1-D.

**Wells Drilling**

A. J. Hooks, Bristow & Merrick 1*.
Otis Chalk, Fred Carey 1.
H. R. Clay, Comet Pet. 1.
Otis Chalk, Gulf Prod 2.
E. W. Dorothi, Humble Oil & Ref. 2.
Scott, Lockhart & Co. 1.
Otis Chalk, Lockhart & Co. 2*.
Mary Chalf, Mag. Pet. 3, 4.
Hyman Chalk, Mag. Pet. 2.
Sarah Hyman, Mag. Pet 2.
Mary Chalk, Marland Oil 1.
Otis Chalk, Marland Oil 11, 3-A*, 4-A, 1-B, 1-C.
H. R. Clay, Marland Oil 1-A, 2-A.
J. B. Harding, Marland Oil 1*.
Bryse, Marland Oil 1.
H. R. Clay, Reeves & Apperman 1, 2.
Rigs, 8; wells drilling, 24; total, 32.

**JONES COUNTY**

**Rigs**

Howell, Atlantic O. P. & Landreth 2.
Armand & Taylor, Consolidated Oil 1.
Joe Winters, Phillips Pet 3.
Canton, Swensondale Oil 1.

**Wells Drilling**

Southard, Bateman & Campbell 1.
Largent, Gibson & Johnson 1*.
S. W. King, Gillette & Hickey & Cowboy Evans 1.
M. E. Young, Gillette & Hickey 1*.
Birchfield, Grisham & Hunter & Wildman 1.
Williams, Grisham & Hunter & Wildman 1.
Cranston, Hart & Cole 1*.
John Sears, Hurley Oil 2.
Smith, Hutson & Weaver 1.
S. R. Cox, Marland Oil 1.
Larson, Marland Oil 1.
Mason, Marland Oil 2.
Howell, Marston Oil 1.
H. Evans, Mid-Continent Pet. 1.
Thornton, Midwest Exploration 3, 4.
Culberson, Victor H. Martin 1.
Manly, Muse & Robertson & Cowboy Evans 1.
Beasley, Phillips Pet. 1.
Mason, Phillips Pet. 1.
Thornton, Phillips Pet. 1.
Walling, Phillips Pet. 2, 3.
Bristow, Shaw & Rathke et al 1*.
Willis, W. G. Stough et al 1*.
J. M. Higgs, Stebbins Oil 1.
Clark, World Oil 1*.
W. H. Lee, World Oil 1.
Reeves, Zeigler et al 1*.
Rigs, 4; wells drilling, 29; total, 33.

**MITCHELL COUNTY**

**Rigs**

T. L. McKinney, Mag. Pet. 1.
Dowlin, Teas & Stivers 1.
J. J. Handley, The Calif. Co. 3.
E. Morrison, Lse. 1, The Calif. Co. 1.
Pettifils, Lse. 2, The Calif. Co. 3.
W. F. Sanders, J. C. Yancey 1.

**Wells Drilling**

W. R. Womack, Atlantic Oil Prod. 8.
McKenzie, B. H. Cogdell 1*.
C. M. Adams, Eastland Oil 2.
Francis Adams, Mag. Pet. 3.
C. M. Adams, Mag. Pet. 7.
Mary Foster, Mag. Pet. 2.
W. W. Watson, Mag. Pet. 2.
Griffin, Morrison & Thompson 1*.
C. P. Conowhs & Sloan 1*.
Hardee, Teas & Stivers 1*.
C. M. Adams, Lse. 2, The Calif. Co. 4, 5.
W. H. Butler, Lse. 2, The Calif. Co. 1.
Morrison, Lse. 2, The Calif. Co. 18.
J. E. Dollen, B. E. Walter et al 1.
Rigs, 6; wells drilling, 15; total, 21.

**REAGAN COUNTY**

**Rigs**

University, Big Lake Oil 113, 119.
J. D. Suggs, The Texas Company 2.

**Wells Drilling**

University, Big Lake Oil 17-B, 37-A, 57, 72, 73, 82*, 89, 99*, 100, 107, 108, 109, 110, 113, 116.
White, C. M. Cope et al 1*.
University, Hiawatha Oil 1.
University, Group 1, Texon Oil & Land 39, 60, 61, 66, 67, 68, 69, 8-A, 9-A, 10-A, 1-B.
University, Group 2, Texon Oil & Land 6.
Rigs, 3; wells drilling, 29; total, 32.

**UPTON COUNTY**

**Rigs**

Ricker, Humble O. & R. 3.
Bowen, Roxana Pet. 13, 14.
Baker, Sun Oil 1.
King, The Texas Company 23.
John Lane-A, Tex. Pac. Coal & Oil 5, 6.

**Wells Drilling**

J. F. Lane, Beaty et al 1.
M. L. Baker, Bryant & Atlantic Oil Prod. 1.
Burleson, Dixie Oil 10, 18, 19, 20.
Giddings, Hults et al 1.
Burleson, Indpt. Oil & Gas 6*.
Taylor, Indpt. Oil & Gas 7, 8, 13, 71, 73.
Wooley, Indpt. Oil & Gas 12, 13, 14.
Baker, Marland Oil 1-A.
Benton Land, Marland Oil 2.
Burleson, Marland Oil 3, 34*.
Estep, Marland Oil 10, 11, 12.
Gibbs, Marland Oil 2.
Powell, Marland Oil 3.
Sanger, Marland Oil 20.
Shirley, Marland Oil 1-A.
University, Marland Oil 1.
Lane, Prairie Oil & Gas 3, 4.
Baker, Republic Prod. 6.
Bowen, Roxana Pet. 7, 8, 9, 10, 11, 12.
Bull, Sarah & Davis 1.
Shirley, Simms Oil 2, 3.
Jones, Skelly Oil 1.
King, The Texas Company 15, 19, 20, 21, 22.
John Lane -A, Tex. Pac. C. & O. 2, 3, 4.
Sherk, Tex. Pac. C. & O. 5.
Sherk, Wentz Oil 4.
Rigs, 7; wells drilling, 51; total, 58.

**MISCELLANEOUS WEST TEXAS**

**ANDREWS COUNTY**

**Rig**

Sec. 12, Blk. A-35, J. S. Means, B. McKennon (was Neff et al) 1.

**Wells Drilling**

Sec. 18, Blk. A-52, Cowden, A. G. Carter & Zweifel 1*.
Sec. 15, Blk. A-42, W. B. Taylor, Maer & Staniforth 1.

**BORDEN COUNTY**

**Well Drilling**

Sec. 10, Blk. 30, A. J. Long, Pulian Pet. & R. W. Fann 1.

**CASTRO COUNTY**

**Rig**

Sec. 78, Blk. M-7, M. Siemons, Colorado Oil & Ref 1.

**Wells Drilling**

Sec. 27, Blk. M-10, Clements, Gulf Prod. 1.
Sec. 333, Blk. M-6, Crum, Mystery Oil 1*.

**COCHRAN COUNTY**

**Well Drilling**

Lge. 154, Sherman Co. Sch. land, G. C. Landon, J. C. Whicker 1.

**COKE COUNTY**

**Well Drilling**

Sec. 390, Blk. 1-A, E. C. Rawlings, Lipan Oil 1*.

**CONCHO COUNTY**

**Wells Drilling**

Jacob Getthardt Sur., Sam Waring, Associated Pet. 1.
Sec. 49, Blk. 70, Hartgrove, Ark. Fuel 1.
Blk. 240, J. Schouch Sur., Hartgrove, the Exploration Co. 1*.
Sec. 312, Mrs. A. Schmidt Sur., Hartgrove, Gene Mays et al 1.
Sec. 128, Blk. 72, Sansom, Marland Oil & Taylor 1*.

**CROSBY COUNTY**

**Well Drilling**

Sec. 5, Blk. B-9, O. L. Slaton, El Capitan Oil 1*.

**CULBERTSON COUNTY**

**Well Drilling**

Sec. 29, Blk. 62, Radford, James H. Gardner et al 1*.

**DICKENS COUNTY**

**Wells Drilling**

Pitchford ranch, Bowser Mickels et al 1.
Sec. 406, Blk. 1, Blackwell, Moutray Oil Co. & Clancey & English 1*.
Sec. 311, Blk. 1, Jones, Moutray Oil Co. & Clancey & English 1*.

**FISHER COUNTY**

**Wells Drilling**

George Great Sur., Weler, Baldridge, Dillard & Clark 1*.
Sec. 184, Blk. 3, Rochelle, Marland Oil (was Caldwell et al) 1.
Sec. 22, Blk. 20, R. G. Anderson, California Co. 1.
Sec. 15, Blk. 1, Maggenheimer, California Co. 1.
Sec. 15, Blk. Y, Lanius, Danciger Oil & Ref. (F. P. Zoch et al) 1.
W. A. Cross, Mason Oil 1*.
Marberry, R. W. Rainey et al 2*.
Sec. 2, Blk. K, C. M. Webb, Fred Phillips 1*.
Sec. 12, Blk. 23, W. A. Howe, Stearns & Streeter 1.
Sec. 1, J. W. Posey Sur., R. M. Clayton, F. P. Zoch et al 1.

**FOARD COUNTY**

**Well Drilling**

Sec. 27, Blk. L, L. McAdams, Humble Oil & Ref. & Navarro Oil 1.

**GARZA COUNTY**

**Rigs**

Connell, Emerald Oil 2.
Sec. 127, Blk. 5, D. Boren, Emerald Oil 1.
Sec. 2, Blk. 6, Justick, Pandem Oil 1.

**Well Drilling**

Connell, Emerald Oil 1-A*.

**GLASSCOCK COUNTY**

**Wells Drilling**

Sec. 20, Blk. 32, Calder, Mascho & Marland Oil 1*.
Sec. 11, Blk. 35, L. S. Bell, Plateau Oil 1.
Sec. 160, Blk. 29, W. R. Settles, Texon Oil & Land & Marland Oil 1.

**HALL COUNTY**

**Rig**

Sec. 179, Blk. S-5, Owens, Selfert et al 1.

**HOCKLEY COUNTY**

**Well Drilling**

Sec. 55, Blk. A, Ellwood, El Capitan Oil 1.

**IRION COUNTY**

**Wells Drilling**

Abe Mayer, Cash Dollar et al 1*.
G. J. Bird, Cash Dollar et al 1*.

**JEFF DAVIS COUNTY**

**Wells Drilling**

McCutcheon, Humble Oil & Ref. 1.
J. Z. Means, J. K. Hughes Dev. 1*.

**KIMBLE COUNTY**

**Well Drilling**

Harrison, Dixie Oil 1.

**KING COUNTY**

**Rigs**

Patton, Hoffer Oil 1.
Burnett Est., Phillips Pet. 1.

**LAMB COUNTY**

**Well Drilling**

Yellowhouse, E. C. Marrs, et al 1.

**LUBBOCK COUNTY**

**Well Drilling**

Bowles Ranch, Sam Arnett et al 1.

**LYNN COUNTY**

**Well Drilling**

C. O. Edwards, Hart Oil 1*.

**MENARD COUNTY**

**Well Drilling**

White, J. R. Lewis et al 1*.

**MOTLEY COUNTY**

**Well Drilling**

J. W. Owens, Chechaco Oil 1*.

**NOLAN COUNTY**

**Rigs**

Booth, Peters et al 1.
Allen, Thomas & Reynolds 1.
Pepper, McClesky et al 1.
Scott, Phillips Pet. 1.

**Well Drilling**

Longbotham, Zweifel et al 1*.

**PARMER COUNTY**

**Well Drilling**

Farwell, Humble Oil & Ref. 1.

**PECOS COUNTY**

**Rig**

Union Land Co., California Co. 1.

**Wells Drilling**

J. C. Trees, Benedum & Trees 1.
Hagan, Buell et al 1.
University, Buell & Hagan 1.
Blackman, Cromwell & Kimberlin 1*.
Rheinstrom, Kirby Oil 1.
Yates, Kimberlin & Pickrell 1*.
K. C. & Ft. Stockton, Del Rio Drlg. Syn. 1*.
Cannon, Kershaw & Livingston 1*.
Yates, Mid-Kansas Oil & Gas & Transcontinental Oil 3.
Townsite, Quinby Oil 1*.
Bennett, Quinby Oil 2*.

**REEVES COUNTY**

**Wells Drilling**

Caldwell, Deep Rock Oil 1.
State Land, Grisham & Hunter 1*.
Kloh, Humble Oil & Ref. 1-B.
Biggs, World Oil 1.

**RUNNELS COUNTY**

**Rigs**

Ferguson, Moore & Bell 1.
R. M. McMillan, Lou Ladd et al 1.

**Well Drilling**

W. W. King, Associated Pet 1*.

**SCHLEICHER COUNTY**

**Rig**

Ball Robinson, Thomas Gray et al 1.

**Wells Drilling**

Whitten, Beavers & Leath et al 1*.

**SCURRY COUNTY**

**Well Drilling**

T. C. Stinson, Northwest Co. 1.

**STERLING COUNTY**

**Well Drilling**

Clark, J. P. Williams 1.

**TAYLOR COUNTY**

**Rigs**

Hammer, Dorning & Perrine 1.
Hunt, Halbert et al 1.
Mrs. Alice Rose, Morrison & Thompson 1.

**Wells Drilling**

City of Abilene, Fee 1*.
Haines & Hamilton, Oil Oprs. Trust 1.
Huddleston, Grisham & Hunter 1.
Dora Smith, Midwest Exploration 1.
Toombes, Midwest Exploration 1.
Cox, Sanger Oil & Ref. 1*.
Ike Brown, Sanger Oil & Ref. 1.
Gillespie, Sanger Oil & Ref. 1.

**TERRELL COUNTY**

**Well Drilling**

Robertson, E. T. Williams et al 1*.

**TERRY COUNTY**

**Well Drilling**

Brownfield, Kingsland Oil & Potash 1*.

**VAL VERDE COUNTY**

**Wells Drilling**

Moore Est., A. Blume et al 1*.
Holman, Curso Williams 1*.
Sellars, Douglas Oil Co. 1*.
Russell, East Del Rio Oil 1*.
Sellars, Hiawatha Oil 1*.
Whitehead, Indpt. Operators 1*.
Mills, O. O. Owens 1.
W. S. Stevenson, Transcontinental Oil 1*.

**WARD COUNTY**

**Well Drilling**

J. Sealey, Marland Oil 1.

**WINKLER COUNTY**

**Rigs**

Hendricks, So. Crude Oil Purchasing 3.
Hendricks, Humble Oil & Ref. 1.

**Wells Drilling**

T. G. Hendricks, Gulf Prod. 1.
Cowden, Champlin Drlg. 1.
Tobe Martin, McCullough Oil 1.
State, R. S. Matthews et al 1.
Hendricks, Indpt. Oil & Gas 1.
John Sealy, F. P. Zoch et al 1.
Amburgey, L. D. Ladd, Hill et al 1.
Leeman, Skelly Oil 1.
Hendricks, So. Crude Oil Purchasing 2.
Scarborough, Llano Oil 1.

## TEXAS PANHANDLE

**Summary of Wells Completed**

| County— | Comp. | Prod. | Dry | Gas |
|---|---|---|---|---|
| Carson | 8 | 890 | 1 | 1 |
| Gray | 11 | 453 | 2 | 2 |
| Hartley | 1 | 0 | 1 | 0 |
| Hutchinson | 48 | 9,645 | 1 | 3 |
| Moore | 1 | 244 | 0 | 0 |
| Potter | 2 | 0 | 2 | 0 |
| Wheeler | 3 | 0 | 0 | 3 |
| Total February | 74 | 11,232 | 7 | 9 |
| Total January | 101 | 23,204 | 5 | 3 |
| Difference | 27 | 11,972 | 2 | 6 |

**Summary of Rigs and Wells Drilling**

| County— | Rigs | Drlg. | S.D. | Ttl. |
|---|---|---|---|---|
| Carson | 22 | 54 | 6 | 82 |
| Gray | 12 | 35 | 6 | 53 |
| Hutchinson | 76 | 166 | 13 | 255 |
| Wheeler | 16 | 18 | 1 | 34 |
| Miscellaneous | 8 | 31 | 23 | 62 |
| Total February | 133 | 304 | 49 | 486 |
| Total January | 125 | 264 | 72 | 461 |
| Difference | 8 | 40 | 23 | 25 |

**TEXAS PANHANDLE COMPLETIONS**

**CARSON COUNTY**

Bryan, Champlin Ref. Co. 1 ..... 250
John Dees, Gamble & Co. 1 ..... dry
Burnett, Acct. 3, Humble O. & R. Co., 1 gas
Burnett-E, Marland Oil Co. 1 ..... 200

Burnett-F, Marland Oil Co.1 ..... 60
Bryan-D, Roxana Pet. Corp. 2 ..... 240
C. W. Garner, The Texas Company 1.. 40
M. P. Co. fee, The Texas Company 1.. 100

Wells completed ..... 8
Production ..... 890
Dry ..... 1
Gas ..... 1
Gas production ..... 20,000,000

**GRAY COUNTY**

J. S. Mackie, Boone Drilling Co. 1.... dry
W. F. Dial, Constantine 1 ..... gas
P. A. Worley, Gulf Prod. Co. 7 ..... 120
Merten, Humble Oil & Ref. Co. 5 ..... 25
Merten, Humble Oil & Ref. Co. 13 .... 11
Merten-A, Prairie Oil & Gas Co. 7.... 180
Merten-B, Prairie Oil & Gas Co. 1.... 27
A. G. McKay, Skelly Oil Co. 1 ..... gas
C. R. Garner, Southwestern Oil & Dev. 1 25
O. N. Frasier, The Texas Company 1.... 65
W. E. Gammage, Upham Gas Co. 1.... dry

Wells completed ..... 11
Production ..... 453
Dry ..... 2
Gas ..... 2
Gas production ..... 100,000,000

**HARTLEY COUNTY**

J. M. Shelton, Humble Oil & Ref. Co. 2. dry

**HUTCHINSON COUNTY**

J. A. Whittenberg-A, Amerada Pet. 5.. 30
Smith, Black Diamond Oil Co. 1 ..... 25
Smith, Dixon Creek Oil Co. 26..... 15
Smith, Dixon Creek Oil Co. 31 ..... 700
Smith, Echo Oil Co. 1 ..... 100
Johnson-B, Empire Gas & Fuel Co. 1.. 85
Johnson-B, Empire Gas & Fuel Co. 5.. 50
J. F. Weatherly, Empire Gas & Fuel Co. 12 ..... 40
J. A. Whittenberg-A, Goldeline Oil Co. 1 145
K. Riemer, Gulf Prod. Co. 1 ..... gas
Kingsland-A, Hughes Dev. Co. 12..... 140
Kingsland-C, Hughes Dev. Co. 2 ..... 120
J. A. Whittenberg, Marland Oil Co. 6.. 30
Smith, J. H. Middleton et al 1..... 75
Smith-Dick, Midwest Explo. Co. 1 ..... 350
Smith, Midwest Explo. Co. 6 ..... 250
J. A. Whittenberg Midwest Explo. Co. 1. 120
Christian, Phillips Pet. Co. 1 ..... 110
Christian, Phillips Pet. Co. 2 ..... 420
Johnson-Dave, Phillips Pet. Co. 1 ..... 60
Johnson-Ford, Phillips Pet. Co. 1 ..... 300
Johnson-Graham, Phillips Pet. Co. 4.... 350
Johnson-Graham, Phillips Pet. Co. 5.... 125
W. L. Kingsland, Phillips Pet. Co. 5.... 75
W. L. Kingsland, Phillips Pet. Co. 7.... 70
J. A. Whittenberg-Elra, Phillips Pet. 4. 150
J. A. Whittenberg-Elra, Phillips Pet. 5. gas
Whittenberg-Patsburg, Phillips Pet. 5.. 600
J. A. Whittenberg-Patton, Phillips Pet. Co. 12 ..... 350
J. A. Whittenberg, Phillips Pet .and Cable Oil Co. 19 ..... 200
Smith, Phillips & Heywood 3 ..... 400
Johnson-A, Prairie et al 23 ..... 500
Johnson-A, Prairie Oil & Gas Co. et al 39 50
Johnson-B, Prairie Oil & Gas Co. et al 6 70
Johnson-B, Prairie Oil & Gas Co. 9.... 25
Johnson-B, Pure Oil Co. 3 ..... 300
Starnes, Rock Island Oil Co. 1 ..... 15
Smith, Roxana Pet. Corp. 4-A ..... 300
Johnson, Ryan Pet. Corp. 4 ..... 300
Williams, Sinclair Oil & Gas Co. 1..... 20
Johnson (Sec. 20), Skelly Oil Co. 14... 215
Johnson (Sec. 20), Skelly Oil Co. 16... 25
Kingsland, Skiatex Oil Co. 3..... 100
Kingsland, Skiatex Oil Co. 6 ..... 1850
Johnson, Southwestern Oil & Dev. Co. 4 150
Smith, Triangle Oil Co. 5 ..... 200
O. W. Jarvis, Western Dev. Co. 1 ..... dry
Johnson-Underwood, White Eagle Oil & Ref. Co. 1 ..... gas

Wells completed ..... 48
Production ..... 9645
Dry ..... 1
Gas ..... 3
Gas production ..... 90,000,00

**MOORE COUNTY**

Sneed, Jr., Cadman et al 1 ..... 224

Wells completed ..... 1
Production ..... 224

**POTTER COUNTY**

Fuqua, Amarillo Oil Co. ..... dry
Carey (Bush), California Co. 1 ..... dry

Wells completed ..... 2
Production ..... 0
Dry ..... 2

**WHEELER COUNTY**

E. A. Linkey, Canadian Oil Co. 1..... gas
T. F. O'Gorman, Vaughon et al 2 ..... gas
J. H. Johnson, World Oil Co. 2..... gas

Wells completed ..... 3
Production ..... 0
Dry ..... 0
Gas ..... 3
Gas production ..... 70,000,000

## TEXAS PANHANDLE

### Wells Drilling

**CARSON COUNTY**

**Rigs**

Sec. 91, Blk. 4, M. P. Co. fee-A, Empire G. & F. Co. 2, 3, 4.
Sec. 90, Blk. 4, M. P. Co. fee-B, Empire G. & F. Co. 1.
Sec. 198, Blk. 3, J. L. Noel, Gulf Prod. 4, 5.
Sec. 198, Blk. 3, J. L. Noel, Marston Oil 1.
Sec. 199, Blk. 3, F. E. Percival, Osborne et al 1.
Sec. 67, Blk. 4, J. W. McConnell, J. T. Parks et al 1.
Sec. 67, Blk. 4, J. W. McConnell-A, Prairie O. & G. 3, 4.
Sec. 67, Blk. 4, J. W. McConnell-B, Prairie O. & G. 1, 2.
Sec. 199, Blk. 3, F. E. Pervival, Prairie O. & G. 1, 2.
Sec. 198, Blk. 3, H. Schafer, Skelly Oil 1.
Sec. 87, Blk. 4, H. Schafer, Skelly Oil 2.
Sec. 86, Blk. 4, H. Schafer, Skelly Oil 3, 4.
Sec. 5, Blk. 9, E. Cooper, Stubblefield et al 1.
Sec. 66, Blk. 4, J. C. McConnell, The Texas Company 1.
Sec. 113, Blk. 4, C. R. Garner, Vitex Oil 1.

**Wells Drilling**

Sec. 22, Blk. Y-2, E. S. Polling, Amatex Dev. Co. 1*.
Sec. 92, Blk. 4, E. F. Bryan, Champlin 2, 3, 4, 5, 6.
Sec. 115, Blk. 4, T. D. Lewis, Delmar Oil 1.
Sec. 72, Blk. 4, Lane, Empire G. & F. 1.
Sec. 198, Blk. 3, S. B. Burnett, Gulf Prod. 21.
Sec. 198, Blk. 3, J. L. Noel, Gulf Prod. 1, 2, 3.
Sec. 199, Blk. 3, Percival, Hughes Dev. 1, 2.
Sec. 127, Blk. 5, Burnett, Acct. 4, Humble O. & R. 1*.
Sec. 107, Blk. 4, E. F. Bryan, F. Knappenberger 1.
Sec. 115, Blk. 5, Burnett, Magnolia Pet. 3*.
Sec. 91, Blk. 4, fee No. 244, Magnolia Pet. 1.
Sec. 116, Blk. 5, Burnett-A, Marland Oil 7.
Sec. 102, Blk. 4, Burnett-I, Marland Oil 1.
Sec. 121, Blk. 5, Burnett-J, Marland Oil 1.
Sec. 93, Blk. 4, C. R. Garner, Marland Oil 1.
Sec. 67, Blk. 4, J. W. McConnell, Marland Oil 1.
Sec. 92, Blk. 5, E. F. Bryan, Marston Oil 1, 6.
Sec. 107, Blk. 4, E. F. Bryan, McMan O. & G. 2, 3, 4, 5, 6.
Sec. 198, Blk. 3, J. L. Noel, McMan O. & G. 1.
Sec. 199, Blk. 3, F. E. Percival, McMan O. & G. 1, 2.
Sec. 1, Blk. 7, G. W. Witter, Mound Valley Oil 1*.
Sec. 22, Blk. Y-3, E. S. Polling, Navajo Oil 1.
Sec. 107, Blk. 4, E. F. Bryan, Nunn & McAuley 2, 3, 4, 5, 6.
Sec. 198, Blk. 3, J. L. Noel, J. T. Parks et al 2.
Sec. 107, Blk. 4, E. F. Bryan, Prairie O. & G. 1*, 2*.
Sec. 67, Blk. 4, J. W. McConnell-A, Prairie O. & G. 2.
Sec. 116, Blk. 4, Burnett, Republic Prod. 1.
Sec. 92, Blk. 4, Bryan-A, Roxana Pet. 3, 4, 5.
Sec. 107, Blk. 4, Bryan-B, Roxana Pet. 2.
Sec. 107, Blk. 4, Bryan-C, Roxana Pet. 1.
Sec. 92, Blk. 4, Bryan-D, Roxana Pet. 1, 3.
Sec. 106, Blk. 4, C. R. Garner, Roxana Pet. 1, 2.
Sec. 92, Blk. 4, E. F. Bryan, Skelly Oil 1.
Sec. 91, Blk. 4, M. P. Co. fee, The Texas Company 1, 2.
Sec. 25, Blk. 4, C. A. Noel, The Texas Company 1.
Sec. 187, Blk. 3, J. L. Noel, The Texas Company 1.
Sec. 104, Blk. 4, C. R. Garner, White Deer Oil 2.

Rigs, 22; wells drilling, 60; total, 82.

**GRAY COUNTY**

**Rigs**

Sec. 9, Blk. 25, Crews, Amos et al 1*.
Sec. 61, Blk. B-2, J. M. Patton, British American Ref. Co. 1.
Sec. 174, Blk. 3, W. C. Archer, Empire G. & F. 1.
Sec. 107, Blk. 3, J. F. Meers, Empire G. & F. 1.
Sec. 7, Blk. H, F. Holloway, Johnson & Martin 1.
Sec. 60, Blk. 3, Combs & Worley, Prairie O. & G. 1.
Sec. 82, Blk. 3, Merten-A, Prairie O. & G. 8.
Sec. 61, Blk. 3, Worley & Reynolds, Wilcox-Pampa Oil 23, 24, 25, 26.
Sec. 123, Blk. B-2, C. W. Bradford, J. Williams et al 1.

**Wells Drilling**

Sec. 111, Blk. 2-B, Furneaux, Archer, Blake et al 1*.
Sec. 143, Blk. 2-B, C. W. Bradford, Bay Shore Pet. 1*.
Sec. 92, Blk. 2-B, Bowers, Blackwell & McGee 1.
Sec. 107, Blk. 3, Meers, British American 1.
Sec. 17, Blk. 1, J. E. Williams, Cole O. & G. 1*.
Sec. 129, Blk. 3, Hughey, Empire G. & F. 1.
Sec. 161, Blk. 3, J. J. Wall, Empire G. & F. 1.
Sec. 59, Blk. 25, L. B. Webb, Empire G. & F. 1.
Sec. 147, Blk. 3, W. L. Herndon, Gray County Pet. 1.
Sec. 40, Blk. 3, J. M. Saunders, Gulf Prod. 1.
Sec. 83, Blk. 3, P. A. Worley, Gulf Prod. 10.
Sec. 86, Blk. 3, Binkley, Humble O. & R. 2.
Sec. 112, Blk. 3, T. B. Hazzard, Humble O. & R. 1.
Sec. 83, Blk. 3, Worley & Reynolds, Humble O. & R. 4.
Sec. 19, Blk. 1, J. G. Lane, A. Chapman 1.
Sec. 11, Blk. 3, Fee, Mag. Pet. 1.
Sec. 86, Blk. 3, Osborne-Binkley, McMan O. & G. 1.
Sec. 90, Blk. 3, W. R. Campbell, Pampa Oil 1.
Sec. 141, Blk. 3, M. Leopold, Pampa Pet. 1*.
Sec. 86, Blk. 3, H. M. Davis, Philips Pet. 2, 3, 4.
Sec. 87, Blk. 3, J. H. Merten-Johns, Phillips Pet. 1.
Sec. 86, Blk. 3, Davis, Pure Oil 2, 3.
Sec. 8, Rockwall County school land, E. B. Johnson, Purple Sage Oil 1.
Sec. 66, Blk. 2-B, Mrs. J. A. Hopkins, Riley & Heck 1.
Sec. 114, Blk. 2-M, B. F. Talley, Ruby Oil 1*.
Sec. 83, Blk. 3, Worley & Reynolds, Sun Oil 1.
Sec. 131, B.k. 3, H. M. Barrett, The Texas Company 1.
Sec. 86, Blk. 3, Davis, The Texas Company 1.
Sec. 162, Blk. 3, O. N. Frashier, The Texas Company 1.
Sec. 108, Blk. 3, E. M. Osborne, The Texas Company 1.
Sec. 3, B. & B. Survey, G. H. Saunders, The Texas Company 3.
Sec. 44, Blk. 25, Mrs. J. D. Back, Travis et al 1.
Sec. 83, Blk. 3, Combs & Worley, Wilcox-Pampa Oil 3.
Sec. 62, Blk. 3, Worley & Reynolds, Wilcox-Pampa Oil 18, 19, 20, 21, 22.

Rigs, 12; wells drilling, 41; total, 53.

**Rigs**

**North of the River**

W. F. Allen, Vitex Oil 1.
Sec. 41, Blk. 47, Ida Ingerton, Amarillo Oil 1.
W. S. Christian, Gulf Prod. 2.
C. L. Dial, Gulf Prod. 33, 39.
Sec. 1, Blk. X02, J. J. Perkins-Martin, Phillips Pet. Co. 10, 14.
Christian Survey, W. S. Christian, Plains Drilling Co.

**South of the River**

Sec. 19, Blk. Y, J. F. Weatherly, American Ref. 7.
Sec. 3, Blk. B-4, J. E. Pritchard, Barnsdall Oil 3.
Sec. 3, Blk. B-4, J. E. Pritchard-A, Barnsdall Oil 1.
Sec. 40, Blk. M-21, W. R. Harvey, Burge et al 1.
Sec. 7, Blk. Y, Smith, Currie & Holmes 1.
M. Whitley Sur., Johnson Devonian Oil 8.
Sec. 14, Blk. Y, Smith, Dixon Creek Oil 41.
Sec. 11, Blk. Y, Smith, Dixon Creek Oil, 46, 47, 48.
Sec. 21, Blk. Y, Johnson-B, Empire Gas & Fuel Co. 6, 7.
Sec. 3, Blk. B-3, E. Cockrell, First National Oil 1.
Sec. 1, Blk. LA, B. & S. F. Sur., W. R. Harvey, Flanders Oil 1.
Sec. 6, Blk. Y-2, J. Q. Bost, Golden Eagle O. & R. 1.
Johnson, Grimes & Watts 2.
J. M. Sanford-A, Gulf Prod. 1.
Sec. 5, Blk. Y, Smith, Lenix Oil et al 2.
Sec. 22, Blk. Y, Johnson, Manhattan Oil 1.
J. M. Sanford-A, Marland Oil 1.
Sec. 82, Blk. 46, J. M. Sanford, McMillan Oil 1.
Sec. 70, Blk. 46, Johnson-Barnum, Midwest Exploration 5, 6.
Sec. 13, Blk. Y, J. A. Whittenberg, Midwest Exploration 7, 8.
Sec. 5, Blk. Y, Smith, Midwest Exploration et al 9.
Sec. 22, Blk. Y, Johnson, Peterson et al 1.
Tr. 5, M. Whitley Sur., Johnson-Graham, Phillips Pet. 1, 6.
M. Whitley Sur., Johnson-Walling, Phillips Pet. 2, 3.
Tr. 7, Whitley Sur., Johnson-Williams, Phillips Pet. 4.
Sec. 4, Blk. Y, Kingsland, Phillips Pet. 3.
M. Whitley, J. A. Whittenberg-Patton, Phillips Pet. 17, 18, 19, 21, 22, 23.
Sec. 67, Blk. 46, J. A. Whittenberg-Ruben, Phillips Pet. 1, 2.
Sec. 12, Blk. Y, Smith, Phillips Pet. & Pulaski 7.
Sec. 24, Blk. M-21, W. B. Haile, Pole Cat Oil 1.
Sec. 21, Blk. Y, Johnson-A, Prairie O. & G. et al 52, 53, 54, 55, 56.
Sec. 20, Blk. Y, Johnson-A, Prairie O. & G. et al 57, 58.
Sec. 64, Blk. 46, Johnson-A, Prairie O. & G. et al, 59, 60, 61.
Sec. 22, Blk. Y, Johnson-A, Prairie O. & G. et al 62.
Sec. 4, Blk. B-4, Johnson-A, Prairie O. & G. et al 63.
Sec. 69, Blk. 46, Johnson-B, Prairie O. & G. et al 7.
Sec. 69, Blk. 46, Johnson-C, Prairie O. & G. et al 8.
Sec. 19, Blk. Y, M. Weatherly, Prairie O. & G. 4, 12.
E. B. Jones, Premier Oil 1.
Sec. 4, Blk. Y, Johnson, Southwestern O. & Dev. 5.
Sec. 14, Blk. Y, Smith, Sunburst Oil 3, 4.
Sec. 12, Blk. Y, J. A. Whittenberg, Sunny Jim Oil 4.
Sec. 38, Blk. Y, R. F. Cheatham, Swinney et al 1.
Sec. 5, Blk. 23, T. D. Lewis, Timms Oil 1.
Sec. 6, Blk. Y, W. L. Kingsland, Travelers Oil 4.
Sec. 10, Blk. Y, Smith, Wheeler O. & G. 1.
Tr. 2, M. Whitley, Johson-Montgomery, White Eagle O. & R. 3.

**Wells Drilling**

**North of the River**

Wm. Heath Sur., Caver, Marland Oil 1.
Sec. 50, Blk. M-23, Luginbyhl, Panfield Oil 1*.
Sec. 1, Blk. J, Yake, Anderson & Pritchard 1.
Sec. 23, Blk. M-23, C. H. Jasper, Dominion Oil 1.
J. A. Whittenberg, Goldeline Oil 3.
Sec. 31-A, Blk. V, W. S. Christian, W. Scott Heywood 2*.
W. S. Christian, Marland Oil 5, 6.
Sec. 38, Blk. 47, Cal Merchant, Marland Oil 1, 2, 3.
Sec. 2, Blk. 1, J. J. Perkins, Phillips Pet 3.
Sec. 26, Blk. 47, J. J. Perkins-George, Phillips Pet. 4, 5, 6.
Sec. 1, Blk. X02, J. J. Perkins-Martin, Phillips Pet. 8, 9, 11, 12, 13.
Sec. 36, Blk. 47, Yake-Phillips Pet. 1.
Antonio Dubois Sur., Mrs. R. A. Jameson, Pool & Golding 1.
Sec. 37, Blk. 47, Cal Merchant, Prairie O. & G. 2, 3.
Sec. 35, Blk. 47, William Yake, Prairie O. & G. 1.
Sec. 33, Blk. Z, William Lydal, Sunrise Oil 1*.
Cal Merchant, Wentz Oil 1.

**South of the River**

Sec. 88, Blk. 46, Lee Bivins-B, Amarillo Oil 5.
Sec. 19, Blk. Y, J. F. Weatherly, American Ref. 4, 5, 6.
Sec. 125, Blk. 4, J. L. Moore, Bain et al 1.
Sec. 83, Blk. 46, J. M. Sanford, Berryman et al 1.
Sec. 8, Blk. Y, Smith et al, Blk. Y Pet. 1.
Sec. 14, Blk. Y, Smith, Buffalo Oil 2.
Sec. 6, Blk. 23, T. D. Lewis, Coble Dev. 1.
Sec 14, Blk. Y, Smith, Cockrell-McIlroy Oil 6.
Sec. 15, Blk. Y, Smith, Collier & Taylor 1.
Sec. 1, Blk X03, Johnson, Conklin et al 1*.
Sec. 14, Blk. Y, Smith, Currie Brothers & J. R. Phillips 4*.
Sec. 20, Blk. Y, Johnson, Delmar Oil 2, 4*.
Sec. 20, Blk. Y, Johnson, Derby Oil 5.
Sec. 22, Blk. Y, Johnson-A, Derby Oil 1.
Tr. 4, M. Whitley Sur., Johnson, Devonian Oil 7.
Sec. 4, Blk. 23, E. Cockrell, Diamond Oil 1.
Sec. 11, Blk. Y, Smith, Dixon Creek Oil 45, 49.
Sec. 14, Blk. Y, Smith, Dixon Creek Oil 50, 51, 52.
Sec. 24, Blk. M-21, W. B. Haile, Donald et al 1.
Sec. 28, Blk. 46, Johnson-A, Empire G. & F. 6, 7, 8.
Sec. 70, Blk. 46, Johnson-C, Empire G. & F. 1.
Sec. 73, Blk. 46, J. A. Whittenberg, Empire G. & F. 2.
Tr. 3, M. Whitley Sur., Johnson, Franterhouse & Wetzel 2.
Sec. 9, Blk. Y-2, J. Q. Bost, Globe O. & R. 1*.
Sec. 6, Blk. 23, T. D. Lewis, Great West Pet. 1.
Sec. 66, Blk. 46, Johnson, Gulf Prod 17.
Sec. 70, Blk. 46, Johnson, Gulf Prod. 14, 15, 16, 18, 19.
J. A. Whittenberg-E, Gulf Prod 6.
Sec. 21, Blk. Y, Johnson, Kistler Oil 3, 4.
Sec. 4, Blk. Y, Kingsland, Magic 80 Oil 1.
Sec. 125, Blk. 5, Burnett-H, Marland Oil 1.
Sec. 80, Blk. 46, J. M. Sanford, Marland Oil 1.
J. M. Sanford-B, Marland Oil 1.
J. A. Whittenberg, Marland Oil 7.
Sec. 4, Blk. B-4, E. Cockrell, McIlroy Oil 1.
Sec. 19, Blk. Y, J. F. Weatherly, J. P. McKenney 2.
Sec. 70, Blk. 46, Johnson, Midwest Exploration 2.
Sec. 69, Blk. 46, Johnson-Barnum, Midwest Exploration 1.
Sec. 13, Blk. Y, J. A. Whittenberg, Midwest Exploration 4, 6, 7.
Sec. 5, Blk. Y, Smith, Midwest Exploration et al 8.
Sec. 9, Blk. B-3, E. Cockrell, Mudge Oil 1.
Sec. 2, Blk. B-3, E. Cockrell, Navajo Oil 1*.
Sec. 18, Blk. Y, J. F. Weatherly, Neptune Oil 1.
Sec. 84, Blk. 46, Lee Bivins, Phillips Pet. 1.
Sec. 69, Blk. 46, Johnson-Cruso, Phillips Pet. 1, 2.
Sec. 69, Blk. 46, Johnson-Easter, Phillips Pet. 1, 3, 4.
Sec. 21, Blk. Y, Johnson-Gordon, Phillips Pet. 8.
Sec. 70, Blk. 46, Johnson-Wiley, Phillips Pet. 1, 2.
Sec. 6, Blk. B-4, W. L. Kingsland, Phillips Pet. 8.
J. M. Sanford-Garland, Phillips Pet. 1.
Sec. 62, Blk. 46, G. A. Whittenberg, Phillips Pet. 3.
Lot 10, M. Whitley Sur., J. A. Whittenberg-Burg, Phillips Pet. Co. 6, 7, 8.
J. A. Whittenberg-Byron, Phillips Pet. 2.
Sec. 3, E. Tomlinson Sur., J. A. Whittenberg-Elra, Phillips Pet. 3, 8*, 11, 12, 13.
Lot 20, M. Whitley Sur., J. A. Whittenburg-Haines, Phillips Pet. 3, 4.
Sec. 67, Blk. 46, J. A. Whittenburg-Patsburg, Phillips Pet. 6, 7, 8, 9, 10.
M. Whitley Sur., J. A. Whittenberg-Patton, Phillips Pet. 13, 14, 15, 16, 20.
Sec. 71, Blk. 46, J. A. Whittenberg-Tinnie, Phillips Pet. 5, 6, 7.
Sec. 12, Blk. Y, J. A. Whittenberg, Phillips Pet. & Cobie Oil 20*.
Sec. 13, Blk. Y, J. A. Whittenberg, Phillips Pet. & Cobie Oil 22, 23, 24, 25, 26, 27, 28.
Sec. 63, Blk. 46, J. A. Whittenberg, Phillips Pet. and Gibson Oil Corp. 11, 12.
M. Whitley Sur., J. A. Whittenberg, Phillips Pet., Gibson & McMillan 5, 6-A, 7*, 8, 9, 10, 11.
Sec. 21, Blk. Y, Johnson-A, Prairie O. & G. 28, 41, 42, 45, 56, 57, 58, 50, 51.
Sec. 20, Blk. Y, Johnson-A, Prairie O. & G. 31, 36.
Sec. 22, Blk. Y, Johnson-A, Prairie O. & G. 40, 42, 49.
Sec. 4, Blk. B-4, Johnson-A, Prairie O. & G. 44.
Sec. 68, Blk. 46, Johnson-B, Prairie O. & G. et al 10.
Sec. 69, Blk. 46, Johnson-B, Prairie O. & G. et al 11, 12.
Sec. 19, Blk. Y, M. Weatherly, Prairie O. & G. et al 11.
Lot 28, M. Whitley Sur., J. A. Whittenberg, Prairie O. & G. et al 1.
Lot 27, M. Whitley Sur., J. A. Whittenberg, Prairie O. & G. et al 3.
Lot 15, M. Whitley Sur., J. A. Whittenberg, Prairie O. & G. et al 5.
Lot 28, M. Whitley Sur., J. W. Whittenberg, Prairie O. & G. et al 1-A.
Johnson-B, Pure Oil 2.
Sec. 22, Blk. Y, Johnson, Red Hill 1*.
Sec. 86, Blk. 46, Lee Bivins, Roxana Pet. 1.
Sec. 4, Blk. B-4, Johnson-Cunningham, Skelly Oil 5.
Sec. 20, Blk. Y, Johnson, Skelly Oil 6*, 13.
M. Whitley Sur., J. A. Whittenberg, Skelly Oil 6.
Sec. 6, Blk. Y, W. L. Kingsland, Skiatex Oil 5, 8.
Sec. 4, Blk. Y, W. L. Kingsland, Southwestern Oil & Dev. 1.
Sec. 3, Blk. M-21, E. Cockrell, Staggers Oil 1.
Sec. 2, Blk. Y, E. Cockrell, Sullivan Oil 1.
Sec. 7, Blk. Y, Smith, Swinney et al 1.
Sec. 5, Blk. 23, T. D. Lewis, The Texas Company 1.
Sec. 15, Blk. Y, Smith, J. D. Ward 1.
Sec. 64, Blk. 46, Johnson-Hagy, White Eagle O. & R. 7.

Rigs, 76; wells drilling, 179; total, 255.

**WHEELER COUNTY**

**Rigs**

Sec. 93, Blk. 17, G. A. Morgan, Angus et al 1.
Sec. 40, Blk. 24, S. L. Lewis, Boyles & Johnson 1.
Sec. 11, Blk. 27, J. H. Jackson, Continental Oil 2.
Sec. 42, Blk. 24, W. E. Bentley, Gibson Oil 2, 3.
Sec. 40, Blk. 24, E. C. Johnson, Mag. Pet. 3, 4.
Sec. 42, Blk. 24, J. A. Wooley, Mag. Pet. 1.
Sec. 41, Blk. 24, W. E. Curlee, Mid-Kan. O. & G. 2, 3.
Sec. 58, Blk. 24, J. A. Clark, Piney Oil 2.
Sec. 1, Blk. 24, C. W. Porter, J. J. Rook 1.
Sec. 42, Blk. 24, W. E. Bentley, The Texas Company 1.
Sec. 42, Blk. 24, W. E. Bentley, Tidal Oil 1.
Sec. 1, Blk. 24, R. W. Griswold, Upham Gas 1.

**Wells Drilling**

Sec. 29, Blk. 13, E. E. Carlton, American Ref. 1.
Sec. 91, Blk. 17, L. C. Burcham, Angus et al 1.
Sec. 11, Blk. 27, W. C. Company, Continental Oil 2.
J. N. Lindsay Sur., S. R. McDonald, Foster et al 1*.
Sec. 41, Blk. 24, H. C. Phillips, Gibson Oil 5, 6.
J. M. Porter, Hill, Cook & Riley 1.
Sec. 93, Blk. 27, J. F. Coates, Lone Star Gas 1.
E. C. Johnson, Mag. Pet. 2.
Sec. 9, Blk. 24, Williams & Laycock, Mag. Pet. 1.
Blk. 24, W. E. Bentley, Marland Oil 1.

Sec. 41, Blk. 24, W. E. Curlee, Mid-Kansas O. & G. 1.
Sec. 77, Blk. 23, Close, Murchison & Fain 1.
Sec. 58, Blk. 24, J. A. Clark, Piney Oil 1.
Sec. 1, Blk. 34, T. C. Jones, J. J. Rook 1.
Sec. 53, Blk. 4-A, Sorenson, Smith, Brady et al 1.
Sec. 40, Blk. 24, Noah Smith, The Texas Company 2.
Sec. 13, Blk. 5-A, E. L. Woodley Sr., E. L. Woodley Jr. 1.
Sec. 88, Blk. A-5, W. J. Johnson, Wheeler O. & G. 1.
Rigs, 15; wells drilling, 19; total, 34.

**MISCELLANEOUS PANHANDLE**
**ARMSTRONG COUNTY**
**Well Drilling**
Sec. 162, Blk. 4, J. P. Rock, United Oil & Trust 1*.
**CHILDRESS COUNTY**
**Rigs**
Sec. 676, W. & N. W. Sur., Mrs. Givens, Brookins et al 1.
**Well Drilling**
Sur. No. 49, F. P. Knott lands, B. P. Smith, C. L. Sloane et al 1.
**COLLINGSWORTH COUNTY**
**Wells Drilling**
Sec. 97, Blk. 22, Martha Johnson, Duke & Langford 1.
Sec. 30, Blk. 16, T. V. Norwood, Martin et al 1*.
Sec. 93, Blk. 16, Fee, Wischkamper 1*.
**DALLAM COUNTY**
**Rig**
Sec. 9, Blk. 47½, James et al.
**Wells Drilling**
Sec. 19, Blk. 17, Capitol Synd., Harry Skelly et al 1*.
Sec. 36, Blk. 18, Capitol Synd., Marland Oil et al 1*.
**DEAF SMITH COUNTY**
**Well Drilling**
Sec. 93, Blk. K-4, Barrett, Red Hill Oil 1.
**DONLEY COUNTY**
**Well Drilling**
Sec. 39, Blk. 3-C, F. E. Harrington, A. T. Drlg. 1.
**HANSFORD COUNTY**
**Wells Drilling**
Sec. 21, Blk. 2, J. Adriance, Caldwell et al 1*.
Sec. 50, Blk. 2, F. A. Davis, F. W. Dillard et al 1*.
Sec. 2, Whitson, Oklavania Oil 1.
**HARTLEY COUNTY**
**Wells Drilling**
Sec. 27, Blk. 16, Frances Farwell, Amerada Pet. 1.
Sec. 9, Blk. 2, Lyman & Balfour, Deep Rock Oil 1*.
Sec. 13, Blk. 13, J. B. Irving, Eslick et al 1.
Sec. 58, Blk. XR, G. B. Coots, W. W. Holmes 1.
Sec. 3, Blk. I.S, E. S. Collins, J. E. McKanna 1.
Sec. 30, Blk. 22, Frances Farwell, J. E. Mckanna 1.
Sec. 29, Blk. 202, J. M. Shalton Est., J. E. McKanna 1.
Sec. 1, Blk. 8-B, J. M. Shelton Est., Kork Oil 1*.
**HEMPHILL COUNTY**
**Wells Drilling**
Sec. 189, Blk. C, J. C. Isaacs, A. J. Calhoun 1*.
Sec. 4, Schaller Est., Hoover et al 1*.
H. S. Hood Sur., Fee, Hoover et al 1.
**LIPSCOMB COUNTY**
**Wells Drilling**
Sec. 612, Blk. 43, Mrs. H. D. May, Everett et al 1*.
A. Barton, McCorkle 1.
Sec. 100, Blk. 43, C. W. Jones, Smith, Kinsley & Ruby 1.
**MOORE COUNTY**
**Wells Drilling**
Sec. 59, Blk. O-18, Masterson-J. Amarillo Oil 1.
Sec. 19, Blk. 44, Terry Thompson, Amarillo Oil 2.
Sec. 112, Blk. 44, H. W. Beauchamp, Douglas Oil 1.
Sec. 25, Blk. 1, J. T. Sneed, Marland Oil 1.
Sec. 28, Blk. 44, Kilgore, Humble O. & R. 1.
Sec. 191, Blk. 3-T, Rubert, Morton & Co. 1.
Special Sneed, Phillips Pet. 2.
Sec. 26, Blk. 6-T, Sneed, Prairie O. & G. 2*.
Sec. 30, Blk. 6-T, Sneed, Moore Co. Oil 1.
Sec. 237, Blk. 44, John Lowery, Shadler Brothers 1*.
Sec. 16, Blk. M-21, Gober, Prairie & Shamrock 1.
**OCHILTREE COUNTY**
**Rig**
Sec. 674, Blk. 43, Weinett, McCorkle 1.
**Wells Drilling**
Sec. 579, Blk. 43, Stickler, W. G. Burton 1*.
Sec. 144, Blk. 43, R. E. Wamble, Hamilton et al 1*.
Sec. 471, Blk. 43, R. H. Moore, McCorkle Pipe Line 1*.
Sec. 923, Blk. 43, Bowden, Standard Dev. 1*.
**OLDHAM COUNTY**
**Well Drilling**
Sec. 46, Lge. 310, Landergin, Prairie O. & G. 1.
**POTTER COUNTY**
**Rig**
Sec. 19, Blk. 9, W. H. Bush, Kelmey Oil 1.
**Wells Drilling**
Sec. 167, Blk. 2, Townsite, Greater Amarillo Pet. 1*.
Sec. 3, Blk. 1, J. A. Jones, Farmer O. & G. 1*.
**RANDALL COUNTY**
**Well Drilling**
Sec. 60, Blk. K-14, Campbell & McIlroy, Patterson et al 1*.
**ROBERTS COUNTY**
**Rig**
Sec. 179, Blk. 42, A. H. Tandy, Pan-State Oil 1.
**Wells Drilling**
Sec. 7, Blk. 5-A, Mrs. H. Ledrick & Sons, Big Bend Oil 1*.
Sec. 100, Blk. C, T. S. Jones, Gibson Oil 1*.
Sec. 31, Blk. M-2, Gill, Murphy et al 1*.
Tr. 2, Clay County school land, Hamilton, Charles Page et al 1*.
Sec. 29, Blk. 1-B, J. A. Meade, Pettijohn et al 1*.
School land Sur., A. H. Tandy, Trammell et al 1*.

**SHERMAN COUNTY**
**Wells Drilling**
Sec. 35, Blk. 3-B, Bivins, Gibson Oil 1.
Sec. 161, Blk. 1-C, Roach, Phillips Pet & Savoy 1.
**SWISHER COUNTY**
**Wells Drilling**
Sec. 8, Blk. M-13, Stallings, Keagan & Baker 1*.
Rigs, 8; wells drilling, 54; total, 62.

# SOUTHWEST TEXAS FIELDS

**Summary of Field Operations**

| | Comp. | Prod. | Dry | Gas | Rig | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Mirando | 33 | 868 | 6 | 16 | 19 | 64 | 83 |
| Rockdale- | | | | | | | |
| Minerva | 19 | 408 | 2 | 0 | 3 | 9 | 12 |
| Luling | 6 | 385 | 0 | 0 | 0 | 4 | 4 |
| Kingsville | 2 | 200 | 0 | 1 | 1 | 4 | 5 |
| Refugio | 3 | ... | 0 | 3 | 0 | 4 | 4 |
| Ina Field | 0 | ... | 0 | 0 | 0 | 1 | 1 |
| Adams gas field | 3 | ... | 0 | 3 | 1 | 3 | 4 |
| Miscl. | 23 | 14 | 19 | 2 | 11 | 71 | 82 |
| Total Feb. | 89 | 1,875 | 27 | 25 | 35 | 160 | 195 |
| Total Jan. | 83 | 2,309 | 27 | 13 | 50 | 171 | 221 |
| Difference | 6 | 434 | 0 | 12 | 15 | 11 | 26 |

**WELLS COMPLETED**
**MIRANDO DISTRICT**

**Cole Field—Duval—**
Houston Oil-Tyng 1 ..... gas
Houston Oil 6 ..... abd
Cole Petroleum 30 ..... gas
Associated Oil 1 ..... gas
Houston Oil-Sun Oil ..... gas
**O'Hern & Seacord—Duval—**
Associated Oil 4 ..... gas
Morris Drilling 2 ..... gas
Magnolia Pet. 1 ..... gas
**Henne, Winch & Farris-Kitselman & St. Albans—Jim Hogg—**
Magnolia Petroleum 22 ..... 60
K. & S. Corp. 56 ..... abd
Associated Oil 3 "A" ..... gas
Associated Oil 2 ..... gas
Magnolia Petroleum 23 ..... gas
Edward St. Albans 3 ..... 200
Magnolia Petroleum 24 ..... gas
**Randado Field—Jim Hogg**
Grayburg Oil 14 ..... 40
Magnolia Petroleum 15 ..... gas
M. J. Bashara 6 ..... abd
Magnolia Petroleum 18 ..... 60
Johnson 20 ..... gas
Grayburg Oil 12 ..... 40
Grayburg Oil 13 ..... 100
Magnolia Petroleum 14 ..... 50
J. L. Collins Co. 9 ..... 100
**Schott—Webb—**
George Marshall 1 ..... abd
O. W. Killam 1 ..... abd
G. R. Miller 1 ..... abd
**Mirando Valley Pool—Webb—**
Oil Operators Trust 3 ..... 40
Oil Operators Trust 5 ..... 30
**Bruni Tracts—Webb—**
Verdine Oil 2 ..... gas
Sun Oil ..... 108
**Carolina-Texas Field—Webb—**
Houston Oil 2 ..... gas
Associated Oil D-4 ..... gas

Wells completed ..... 33
Gassers completed ..... 16
Production ..... 868
Dry and salt water ..... 6
Gas production ..... 335,000,000

**ROCKDALE-MINERVA**
Henry Davis-Billy Smith 2 ..... 50
Smith Oil-Lowenstein 1 ..... 2
Rockdale Oil-Lorenz 2 ..... 25
Eisenmeyer-Fowler 2 ..... abd
Gaither 6 ..... 15
Earnest Noack-Seelke 1 ..... 12
Noack & Laning-Baldridge 7 ..... 15
Birdwell & Pampli-Gamhill 1 ..... 30
Coffield-Hass-Smith 1 ..... 100
Wills Oil-Kevil 3 ..... 72
Kent-Middleton-Streisky ..... 15
Lee Cochran-Luetege ..... 12
Groneman Brothers-McCauley 2 ..... abd
J. Laramore-Williams ..... abd
Dick Bartlett-Kevil 2 ..... 20
Palmer-Newton-Dees 2 ..... 10
Jimmy Laning-Phillips-Perry 1 ..... 10
Chicago Oil-Gambill 1 ..... 10
E. Noack-Baldridge ..... 10

Wells completed ..... 19
Production ..... 408
Dry and abandoned ..... 2

**LULING**
Magnolia Petroleum-Marines 22 ..... 50
Magnolia Petroleum-Rios 17 ..... 75
Magnolia Petroleum-Rios 16 ..... 75
Magnolia Petroleum-Gidion 12 ..... 75
Magnolia Petroleum-Tiller 9 ..... 50
Magnolia Petroleum-Rice 15-R ..... 60

Wells completed ..... 6
Production ..... 385
Dry and abandoned ..... 0

**KINGSVILLE FIELD—KLEBERG**
Humble Oil & Ref.- A-2 Dennett ..... 200
Kepley Oil Corp.-Jones Well 1 ..... gas

Wells completed ..... 2
Production ..... 200
Gassers completed ..... 1
Gas production ..... 8,000,000
Dry and abandoned ..... 0

**REFUGIO FIELD—REFUGIO**
Houston Gulf Gas-Fox 1 ..... gas
Houston Gulf Gas-Rea 2 ..... gas
Houston Gulf Gas-Fox Estate 2 ..... 2

Wells completed ..... 3
Gassers completed ..... 3
Gas production ..... 120,000,000
Dry and abandoned ..... 0

**ADAMS GAS FIELD—MEDINA**
Medina Syndicate-Adams 2 ..... gas
Western G. & F.-Adams 4 ..... gas
Witherspoon Oil-Franklin 1 ..... gas

Wells completed ..... 3
Gassers completed ..... 3
Gas production ..... 81,700,000
Dry and abandoned ..... 0

**MISCELLANEOUS**
**Bastrop County—**
Trigg, Johnson Brothers 3 ..... abd
**Brooks County—**
Lasater, Ballard & Underwood 2 ..... abd
**Bexar County—**
Southton Field, Ren-Tex ..... 6
Southon Field, Kerr & Andrews ..... 8
Welters, B. F. Thompson 1 ..... abd
Fee, R. V. Saur 1 ..... abd
**Gonzales County—**
Billings, Kercheval 1 ..... abd
Denman, Bristol Oil & Gas 1 ..... abd
**Live Oak County—**
Brown, Houston Oil Co. 1 ..... gas
Sartian, Henderson & Coquat 5 ..... abd
**Medina County—**
Courand, Golden West 1 ..... abd
**San Patricio County—**
Shugart, Albertson 1 ..... abd
**Starr County—**
Newman, Danciger-Dauchy & Maddox 1 ..... abd
**Travis County—**
Romberg, Cypress Creek 1 ..... abd
**Duval County—**
Maddox-Guerra, Texas-Humble ..... abd
Jones, Holden 3 ..... abd
Palacious, Trussell-Cezueau-Putman, 1. abd
King, Milham Corp. 1 ..... abd
Dilworth, Humble 1 ..... abd
Benavides, Livingston & Baker 1 ..... abd
**Webb County—**
De la Garza, Staggs 1 ..... abd
Paige-Garcia, Magnolia 1 ..... abd
**Zapata County—**
Cuellar, Magnolia 3 ..... gas
Hinnant, Killam-Duggan 1 ..... abd
Martinez, Duke 2 ..... abd

Wells completed ..... 23
Gassers completed ..... 2
Gas production ..... 43,500,000
Production of oil ..... 14
Dry and abandoned ..... 19

**ATASCOSA COUNTY**
**Rig**
Foster, Frontier Oil 7.
**Well Drilling**
Hopkins, Frontier Oil 8.
Rigs, 1; well drilling 1; total, 2.
**BEXAR COUNTY**
**Rig**
Ackerman, A. R. Beall 1.
**Wells Drilling**
Fee, Hamilton Land & Dev. 17.
Sodrok, W. L. McClanahan 3.
Rig, 1; wells drilling, 2; total 3.
**BASTROP COUNTY**
**Wells Drilling**
Trig, Johnson Brothers 3.
Naumann, Neal A. Nelson 1.
Wells drilling, 2; total, 2.
**BEE COUNTY**
**Well Drilling**
Hicks, Nichols & White 1.
Well drilling, 1; total, 1.
**BREWSTER COUNTY**
**Well Drilling**
Wilson, Green Valley Oil 3.
Well drilling, 1; total, 1.
**BURLESON COUNTY**
**Wells Drilling**
Bowers & Bowers, E. F. Gordon 1.
Hilliard-Lewis, Caldwell Oliphant Oil 3.
Geisenschlog, Caldwell Oliphant Oil 1.
Wells drilling, 3; total 3.
**CALDWELL COUNTY**
**Rig**
Lawler, L. I. Dodwell 1.
**Wells Drilling**
Alf Mercer, Mag. Pet. 16.
Rios, Atlantic O. & R. 2.
Kelly, North & South 1.
Tiller, North & South 1.
Carter, Sutton & Smith 1.
Carter, Fynne Brothers 1.
Jeffreys, John Storey 1.
Rig, 1; wells drilling, 7; total, 8.
**DEWITT COUNTY**
**Rigs**
Kaiser, McNeil & Mathews 1.
Gohmert, Louis P. Schawe 1.
**Wells Drilling**
Smith, Empire Southern 1.
Tom Burns, Yoro Development 1.
Rigs, 2; wells drilling, 2; total, 4.
**DIMMITT COUNTY**
**Well Drilling**
City, Natl. Bank, Humble O. & R. 1.
Well drilling, 1; total, 1.
**FRIO COUNTY**
**Well Drilling**
Blackaller, P. A. Nellan 1.
Well drilling, 1; total, 1.
**FAYETTE COUNTY**
**Well Drilling**
Rosa Russek, George W. Zeigin 1.
Well drilling, 1; total, 1.
**GOLIAD COUNTY**
**Well Drilling**
Pettus, Houston Oil 3.
Well drilling, 1; total, 1.
**GONZALES COUNTY**
**Rigs**
Denman, Bristol Oil & Gas 2.
Billings, Kercheval Production 2.
**Wells Drilling**
Hariss, John W. Hoosier 1.
Preston, Martin Oil & Development 1.
Elder, E. Lee Moore 1.
Vaughan, Joe Bruner 1.
Lamkin, C. A. Campen 1.
Rigs, 2; wells drilling, 5; total 7.
**GUADALUPE COUNTY**
**Rig**
Weinert, F. A. Lain 1.
**Wells Drilling**
Angelke, F. G. Blumberg 1.
Dale, Pat Armstrong 1.
Angelke, Pat Armstrong 1.
Weinert, J. M. Davis 1.
Rig, 1; wells drilling, 4; total, 5.
**HAYS COUNTY**
**Well Drilling**
Hohenburg, J. E. Rodgers 1.
Well drilling, 1; total, 1.
**KARNES COUNTY**
**Well Drilling**
Butler, Earl B. Reynolds 2.
Well drilling, 1; total, 1.
**KERR COUNTY**
**Well Drilling**
Leigh, Walker-Van Duyn 2.
Well drilling, 1; total, 1.
**KINNEY COUNTY**
**Well Drilling**
———, Havelin Oil 1.
Well drilling, 1; total, 1.
**KLEBERG COUNTY**
**Rig**
Flato, J. E. Walsh 1.
**Wells Drilling**
Kivlin, A. C. Erwin 1.
Dennett, Humble Oil B-1.
Kleberg Trustee, Humble Oil 3.
Kleburg Trustee, Humble Oil 1.
Flato-Clarke, Humble Oil 3.
Rig, 1; wels drilling, 4; total, 5.
**LAVACA COUNTY**
**Well Drilling**
Steinman, Steinman Brothers 2.
Well drilling, 1; total, 1.
**LEE COUNTY**
**Wells Drilling**
Wachemann, Plunkett 1.
———, M. O. Ricketts 1.
Wells drilling, 2; total, 2.
**LIVE OAK COUNTY**
**Rig**
Dunning, Houston Oil 1.
**Wells Drilling**
Sellers, Houston Oil 2.
Sartain, Henderson & Coquat 5.
Roberts, J. W. Walton 1.
Adair, W. G. Clark 1.
Rig, 1; wells drilling, 4; total, 5.
**MEDINA COUNTY**
**Rig**
Adams, Western Gas & Fuel 5.
**Wells Drilling**
Nixon, Arnett Oil 5.
Adams, Henderson & Holden 7.
Adams, Western Gas & Fuel 2.
Redus, Witherspoon 1.
Fohn, F. L. Williams 1.
Taylor, Medina Oil 10.
Mumme, Johnson 1.
Keller, Ralph R. Lewis 1.
Mann, J. H. Gray 1.
Oeffingers, J. A. Swayze 1.
Kenedy, Alamo Drilling 1.
Fingers, Ina Oil 1.
Zerr, Cecil Switzer 1.
Berger, Wheless-Peters 1.
Lacey, Pat Armstrong.
Long, Pat Armstrong.
Eaton, J. E. Walsh.
Carpenter, Gibson Oil.
Rothe, California-Medina 1.
Rig, 1; wells drilling, 19; total, 20.
**MAVERICK COUNTY**
**Wells Drilling**
———, Hume-Lindenborne 1.
Whipff, Johnstone & Hout.
Chittin, Rycade Oil 2.
Sullivan, Rycade Oil 2.
Wells drilling, 4; total, 4.
**MILAM COUNTY**
**Rigs**
Chandler, Groneman Brothers 1.
Baldridge, Noack & Laning 8.
———, Cranfill & Reynolds 1.
**Wells Drilling**
Lorenz, Rockdale Development 3.
Gambil, Chicago Oil & Land 2.
———, Carl Fogle 1.
Phillips-Perry, E. H. Noack 2.
Luetge, R. T. Clifton 1.
Mrs. Tom Fowler, Baggett Brothers 1.
Arnold, Clear Lake Oil 1.
Bartlett, Elbert Williams 1.
Marshall, Noack & McCormick 1.
Rigs, 3; wells drilling, 9; total, 12.
**M'MULLEN COUNTY**
**Wells Drilling**
Frankin, Dodson 1.
Jacobs, Houston Gulf Gas 5.
Shiner, Geo. E. Pope 4.
Kuykendall, Geo. M. Ball 1.
Frabklin, Ark. Natural Gas 2.
Wells drilling, 5; total, 5.
**REFUGIO COUNTY**
**Wells Drilling**
Lambert, Houston Gulf Gas 2.
Heard, Houston Oil 9.
Breeding, Houston Gulf Gas 1.
Rose Rodgers, Wm. F. Morgan 1.
Wells drilling, 4; total, 4.
**SAN PATRICIO COUNTY**
**Rig**
McCampbell, John Sigmund 7.
**Well Drilling**
Freeman, Ed. Leach 1.
Rig, 1; well drilling, 1; total, 2.
**VICTORIA COUNTY**
**Rig**
Reeves, R. M. Talbott 1.
Rig, 1; total, 1.
**WILSON COUNTY**
**Wells Drilling**
Haese, Thomas 1.
Espey, Gibson Oil 1.
Wells drilling, 2; total, 2.
**WILLIAMSON COUNTY**
**Wells Drilling**
Breeden, Navarro Oil 1, 2.
Brookshire, Hartman 3.
Fouse, Williamson County Oil 4.
Nelson, Williamson County Oil 1.
Wells drilling, 5; total, 5.
**MIRANDO DISTRICT**
**Rigs**
Cole, Harper, Mag. Pet. 1.
Benavides, Cole Pet. 33.
Sur. 332, Hayes, Mag. Pet. 1.
Randado—M. S. Bank, Mag. Pet. 18.
De la Garza, Mag. Pet. 20.
H-W-F, Martinez, Mag. Pet. 34, 35.
K. & S.—Lopez, Edward St. Albans 6.
Holbein, K. & S. 57.
Holbein, Edward St. Albans 1.
Alworth, Garza, Alworth Brothers 3.
Schott—Garcia, Jones 3.
Garcia, Mag. Pet. 6.
Aviator—Anderson, J. L. Johnson 1.
Bruni, Neal, Ramsland 1.
Carolina-Texas—de la Garza, Hamilton-Warner 1.
De la Garza, Mims & Putman 1.
Block 5—Puig, Ray Wood 1.
Garcia, Rawlins & Pelton 1.
**Wells Drilling**
Cole—Benavides, Houston Oil-Sun Oil 3-B. Benavides, Cole Pet. 23, 28, 31, 32.
Piedras Pintas—Becher, Humble Oil 1.
Tinney, Gulf Prod. 1.
O'Hearn & Seacord—Benavides, Associated Oil 5.

Benavides, O'Hern & Seacord 2.
Willman, Cin-Tex Petroleum 1.
Survey 4, Margarite, Ralston M. Talbott 1.
Survey 4, Singer, Humble Oil 11.
Survey 126, Dilworth, Humble Oil 2.
Survey 144, Kohler, Humble-Reiter-Foster 3, 4.
Survey 76, Hahl, H. M. Schlesinger 1.
Block 10, King, Hoffer-Smith 1.
Survey 51, Hahl, Mag. Pet. 1.
Hidalgo Co., Poorbough, Hidalgo Oil 1.
Fernandez, D. L. Smith Oil 5.
Randado—M. S. Banks, Mag. Pet. 16.
De la Garza, Mag. Pet. 19.
Palacious, Livingston & Baker 1.
Well, The Texas Company 1.
H-W-F, Martinez, Mag. Pet. 21, 25.
K & S.—Lopez, Edward St. Albans 5.
Lopez, Killam-Lang 1.
Holbein, K. & S. 52.
Alworth—Garcia, Dauchy-Maddox & Harvey 1.
M. S. Banks, Mag. Pet. 17.
Block 136—Jones, Holden 3.
Vela, Roxana Pet. 1.
Holbein, Hamilton 1.
Starr, Porcion 69, Russell, Southern 2.
Block 6, Salinas, Simms-Magnolia 1.
Survey 918, Garcia, Heard & McCarley 1.
Survey 538, Garcia, T. C. Hadley 1.
Porcion 107, Guerra, Milham 1.
Porcion 111 and 9, Salinas, Milham 1 2.
Block 8, Yzaguirre, Sterling & Suladie 1.
Schott, Garcia, Mag. Pet. 7.
Aviator, Puig, Geo. M. Ball 4.
Bruni, Killam-Maddox 1.
Bruni, Crown Central 21.
Bruni, Sun Oil 13.
Mirando Valley—Garcia, R. F. Duggan 1.
Garcia, Crown Central 10.
Carolina-Texas—Webster, Associated Oil B-3.
De la Garza, Hazlitt-Simmons 1.
Vela, M. & N. 1.
Webster, Danile & Best 1.
De la Garza, T. P. Morgan 1.
De la Garza, Barnsley-Chicago 1.
——— Puig, Edward St. Albans 1.
Survey 670, Moglia, Alexander 1.
Survey 17, Gates, Creswell-Fallins 1.
Survey 1570, Kruger, W. O. Wheatley 2.
Survey 43, Billings, Henne-Winch-Killam 1.
Survey 120, Benavides, Ellis 1.
Zapata, Slator, Mission Oil 1.
Villa Grant, Martinez, Buffalo Erie 3.
Jennings, The Texas Company 4.
Rigs, 19; wells drilling, 64; total, 83.

## EAST TEXAS FIELDS

**Summary of Field Operations**

| County— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl |
|---|---|---|---|---|---|---|---|
| Anderson | 1 | .... | 1 | 0 | 0 | 0 | 0 |
| Falls | 1 | .... | 1 | 0 | 0 | 1 | 1 |
| Henderson | 1 | .... | 1 | 0 | 0 | 0 | 0 |
| Kaufman | 1 | .... | 1 | 0 | 0 | 0 | 0 |
| Limestone | 3 | .... | 3 | 0 | 0 | 9 | 9 |
| Navarro | 2 | .... | 2 | 0 | 0 | 3 | 3 |
| Miscl. | 0 | .... | 0 | 0 | 0 | 9 | 9 |
| Total Feb. | 9 | .... | 9 | 0 | 0 | 22 | 22 |
| Total Jan. | 9 | 1,809 | 9 | 0 | 0 | 27 | 27 |
| Difference | 0 | 1,809 | 0 | 0 | 0 | 5 | 5 |

**WELLS COMPLETED**
**ANDERSON COUNTY**

Blk. 16, Humble O. & R. 1 ..... dry

**FALLS COUNTY**

Peacock, High Bank Oil 1 ..... dry

**HENDERSON COUNTY**

Little, Heine Brothers 1 ..... dry

**KAUFMAN COUNTY**

Brown, Barney Carter 1 ..... dry

**LIMESTONE COUNTY**

Thornton, W. K. Cayton 1-B ..... dry
Stroud, Mag. Pet. 4 ..... dry
Cleaver, Alexander & Liles 1 ..... dry

**NAVARRO COUNTY**

Burke, Alexander & Liles 1 ..... dry
Pruitt, The Texas Company ..... abd

Wells completed ..... 9
Production ..... None
Dry ..... 9

**RIGS AND WELLS DRILLING**
(Shut down wells indicated by *)

**Wells Drilling and Shut Down**

**Cherokee County—**
Elliott & Clark, Humble O. & R. 1.
Hill, Nicolle & Wife 1*.
Summer, Mag. Pet. 1.
**Falls County—**
Wilson, Callahan et al 1.
**Franklin County—**
Gandy, Trout et al 1*.
**Freestone County—**
Pickens, Kechi Pet. 5*.
Woods, J. S. Cosden et al 1*.
Colman, Orbit Oil Co. 1*.
**Hopkins County—**
Jackson & Maloney, Amerada Pet. 1.
**Limestone County—**
Dies, C. W. Green et al 1.
Stuberanch, Smith et al 1.
Maddox, Zoch et al 1.
Sharp, Alexander & Liles 1.
Richardson, Transcontinental Oil 1.
Oliver, Shaffer et al 1.
Bassett, Pandem Oil 1.
Fenner, Diller & Hammond 1*.
Jones, Diller & Hammond 1*.
**Navarro County—**
Chaney, The Texas Company 1.
Swink, Sun Oil 3.
Marshall, Mag. Pet. 1.
**Wood County—**
Consumers Land & Coal, E. H. Everett & Co. 1.
Total rigs, 0; wells drilling 22; total 22.

## GULF COAST FIELDS

**Summary of Field Operations**

| Dist.— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Boling | 1 | 0 | 1 | 0 | 1 | 4 | 5 |
| Batson | 4 | 250 | 1 | 0 | 3 | 5 | 8 |
| Big Creek | 3 | 4,850 | 0 | 0 | 1 | 4 | 5 |
| Blue Ridge | 8 | 5,425 | 2 | 0 | 2 | 7 | 9 |
| Barber Hill | 1 | 300 | 0 | 0 | 1 | 2 | 3 |
| Edgerly (La.) | 2 | 320 | 0 | 0 | 1 | 2 | 3 |
| Goose Creek | 4 | 650 | 0 | 0 | 0 | 8 | 8 |
| Humble | 6 | 310 | 3 | 0 | 1 | 5 | 6 |
| Hull | 13 | 3,455 | 4 | 0 | 3 | 9 | 12 |
| High Island | 1 | 0 | 1 | 0 | 0 | 6 | 6 |
| Jennings (La.) | 2 | 10 | 1 | 0 | 1 | 4 | 5 |
| Lockport (La.) | 3 | 6,500 | 0 | 0 | 1 | 5 | 10 |
| Markham | 1 | 200 | 0 | 0 | 0 | 3 | 3 |
| Nash | 0 | 0 | 0 | 0 | 1 | 3 | 4 |
| Orange | 8 | 1,000 | 2 | 0 | 1 | 4 | 5 |
| Orchard | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Pierce Jct. | 5 | 1,185 | 1 | 0 | 4 | 12 | 16 |
| Piedras Pintas | 1 | 0 | 0 | 0 | 0 | 3 | 3 |
| Spindletop | 24 | 29,985 | 13 | 0 | 11 | 18 | 29 |
| Saratoga | 1 | 0 | 1 | 0 | 3 | 1 | 4 |
| Sour Lake | 7 | 2,275 | 2 | 0 | 2 | 5 | 7 |
| South Liberty | 4 | 985 | 0 | 0 | 0 | 5 | 5 |
| Vinton (La.) | 6 | 500 | 2 | 0 | 1 | 5 | 6 |
| W. Columbia | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Miscellaneous | 13 | 0 | 12 | 1 | 29 | 49 | 78 |
| Total Feb. | 118 | 58,200 | 46 | 1 | 67 | 176 | 243 |
| Total Jan. | 91 | 68,006 | 20 | 1 | 53 | 180 | 233 |
| Difference | 27 | 9,806 | 26 | 0 | 14 | 4 | 10 |

**WELLS COMPLETED**
**BOLING**

Farmer, The Texas Company 2 ..... abd

Wells completed and abandoned .... 1

**BATSON**

Hodges, Kirby-Capitol Oil 6 ..... 150
Paraffine, Paraffine Oil 69 ..... abd
Texas, Ada Belle Oil 114 ..... 75
Gulf, East Batson Oil 20 ..... 25

Wells completed ..... 4
Production ..... 250
Abandoned ..... 1

**BIG CREEK**

Davis, Gulf Prod. 35 ..... 1000
Davis, Gulf Prod. 33 ..... 850
Davis, Gulf Prod. 37 ..... 3000

Wells completed ..... 3
Production ..... 4850

**BLUE RIDGE**

Blakely, Gulf Prod. 8-B ..... 175
West-Schenck, Gulf Prod. 2 ..... 1000
Robinson, Navarro Oil 1-B ..... 2200
Blakely, Gulf Prod. 14-C ..... 75
West-Schenck, Gulf Prod. 6 (dpnd.) .. 2000
Blakely, Gulf Prod. 14-C ..... 75
Robinson, J. S. Abercrombie Co. 2 .... abd
Robinson, Navarro Oil 2 ..... abd

Wells completed ..... 8
Production ..... 5425
Abandoned ..... 2

**BARBER HILL**

Kirby, Bennett & Humphrey Corp. 2-B (dpnd.) ..... 300

Well completed ..... 1
Production ..... 300

**EDGERLY**

Hunter, Rex Pet. 4 ..... 20
Hilliard, C. N. Crotty 14 ..... 300

Wells completed ..... 2
Production ..... 320
Gas production ..... 20,000,000

**GOOSE CREEK**

State land, Gulf Prod. 12 ..... 200
Smith, Gulf Prod. 26 ..... 150
Galliard, Gulf Coast 11 (wo) ..... 150
Peninsula, Humble Oil & Ref. 31 ..... 150

Wells completed ..... 4
Production ..... 650

**HUMBLE**

Wilson, W. F. Martin & Co. 1 ..... abd
Hirsch, Benedum & Trees, 1 ..... sw
Wheeler-Pickens, Martin and others 1.. 300
Koehlen, Atlantic O. P. 1 ..... abd
Parker, Woods & Bennett 2 ..... 10

Wells completed ..... 6
Production ..... 310
Abandoned and salt water ..... 3

**HIGH ISLAND**

Lockhart, the Sun Co. 1 ..... a:d

Well completed and abandoned ..... 1

**HULL**

Dolbear, Republic Prod. 18 (wo) ..... 150
Merchant, The Texas Company 1 .... sw
Phoenix, Gulf Prod. 78 ..... dry
Dolbear, Republic Prod. 46 (wo) ..... 125
Crosbie, Cannon & Davies 1 ..... 10
Dolbear, Republic Prod. 10 (wo) ..... 125
Barngrover, Empire Gas & Fuel 23 .. 1075
Phoenix, Gulf Prod. 81 ..... 600
Phoenix, Gulf Prod. 82 ..... 175
Stengler, Gulf Prod. 1 (dpnd.) ..... 600
Morris-Phillips, Gulf Prod. 23 ..... abd
Seale, Mecom Oill 1 (dpnd.) ..... sw
Phoenix, Gulf Prod. 61 (wo) ..... 600

Wells completed ..... 13
Production ..... 3455
Abandoned and salt water ..... 4

**JENNINGS**

SFS, Port City Oil 2 ..... 10
Fee, Coastal Fuel Oil 93 ..... sw

Wells completed ..... 2
Production ..... 10
Salt water ..... 1

**LOCKPORT**

Farquhar, Vacuum-Gulf, 3 ..... 2500
Miller, Vacuum-Gulf 12 ..... 2000
Miller, Vacuum-Gulf 8 ..... 2000

Wells completed ..... 3
Production ..... 6500

**MARKHAM**

Kountz, Rycade Pet. 4 ..... 200

Well completed ..... 1
Production ..... 200

**ORANGE**

Winifree, Humble Oil & Ref. 6 ..... 200
Chesson, Texhoma Oil 13 ..... abd
Winifree, Orange Pet. 4 ..... abd
Winifree, Humble Oil & Ref. 2 ..... 175
Cow Bayou, Rycade Pet. 2-A ..... 100
Carbello, Rex. Pet. 12 ..... 125
Chesson, Orange Pet. 8 ..... 150
Leon, Gulf Coast Oil 5 (wo) ..... 150

Wells completed ..... 8
Production ..... 1000
Abandoned and salt water ..... 2

**PIERCE JUNCTION**

Higgins, J. F. Bashara 2 ..... 25
Settegast, Martin & Co. 1 ..... gas
Jones, M. Kori 1 ..... abd
Jones, Gulf Prod. 3 ..... 60
Settegast, Rio Bravo Oil 5-A ..... 1100

Wells completed ..... 5
Production ..... 1185
Gas ..... 1
Abandoned ..... 1

**PIEDRAS PINTAS**

Tinney, Gulf Prod. 1 ..... gas

Wells completed and gas ..... 1

**SPINDLETOP**

Scherber, Deutser Oil 1 ..... abd
Trombly, Seven Oil 1 ..... abd
Weed, Gulf Prod. 7 ..... 450
Mann, Gulf Prod. 6 ..... 600
Jack & Duff, Gulf Prod. 3 ..... dry
Rush, Deep Sand Oil 3 ..... abd
King, Hines et al 1 ..... sw
Bank, Turnbow Oil 2 ..... abd
McFadden, Highland Oil 1 ..... abd
Davis, Yount Lee Oil 5 ..... 6000
McFaddin, Yount Lee Oil 23 ..... 4500
Weed, Gulf Prod. 11-A ..... 200
Garrick, The Texas Company & New Beaumont Oil 1 ..... abd
McLean, Atlantic Oil Prod. 1 (wo) .... sw
McLean, Sun Co. 6 ..... 375
Weed, Gulf Prod. -A ..... abd
Gladys, Yount-Lee Oil 20 ..... 3500
Hammond, Rush & Pitman 1 ..... abd
Fee, Yount Lee Oil 9 ..... abd
Fee, Magnolia Pet. 2 ..... 8000
McFaddin, Yount Lee Oil 22 ..... 2600
Parker, Hines and others ..... abd
T. & N. O., Rio Bravo Oil 55 ..... 3100
Roche, Gulf. Prod. 8 ..... 360

Wells completed ..... 24
Production ..... 29,985
Abandoned and salt water ..... 13

**SARATOGA**

Kirby, Cotton Oil 5 ..... abd

Well completed ..... 1
Abandoned ..... 1

**SOUR LAKE**

Giescke, Humphrey Corp. 1 ..... 150
Fee, The Texas Company 304 ..... sw
Ebberts, Gulf Prod. 3 ..... a.d
Fee, Minor Oil 80 ..... 10
Merchant, Orange Pet. 3 ..... 2000
Bashara, Humphrey Corp. 5-B ..... 50
Bashara, Humphreys Corp. 1-G ..... 75

Wells completed ..... 7
Production ..... 2275
Abandoned and salt water ..... 2

**SOUTH LIBERTY**

Staiti, The Texas Company 6 ..... 125
Marshall, Gulf Prod. 1 ..... 60
Archer, Gulf. Prod. 1 ..... 600
Riviere, Gulf Prod. 1 ..... 200

Wells completed ..... 4
Production ..... 95

**VINTON**

Vincent, Edgerly Pet. 4 ..... 100
Rescue, Vinton Pet. 5 ..... 150
Vincent, Gulf. Ref. 32 ..... 150
Johnson, Colo. & La. Oil 1 ..... sw
Vincent, Vinton Pet. 18 ..... sw
Gray, Vinton Pet. 37 ..... 100

Wells completed ..... 6
Production ..... 500
Salt water ..... 2

**MISCELLANEOUS**

**Austin County—**
Walton, Humble Oil Co.-Valley Oil 1.. gas
**Jefferson County—**
Fannette dome: Thomas, Gulf. Prod. 1 ..... abd
**Brazoria County—**
Allen Dome: Bernard River, Roxana Pet. 1 ..... abd
Allen, Roxana Pet. 1 ..... dry
**Shelby County—**
Pickering, Roy Anderson 1 ..... abd

**COASTAL LOUISIANA**

**Assumption Parish—**
Clifton, Union Sulphur Co. 2 ..... abd
**Calcasieu Parish—**
Stark Dome: Industrial Lbr., Standard of La. 5 ..... abd
Castile, Earle Poole 1 ..... abd
**Cameron Parish—**
Hackberry Dome: Ellender, Union Sulphur Co. 1 ..... abd
**Jeff Davis Parish—**
Tiere Comier, Emmerson et al 1 ..... abd
**St. Landry Parish—**
Fontent, Farmers Oil & Min. 1 ..... abd
**St. Mary Parish—**
Avoca Island, Pharr & Reed 1 ..... abd
**East Feliciana Parish—**
McKeeler, Border Research Co. 1 .... abd

Wells completed ..... 13
Abandoned ..... 12
Gas ..... 1

**DRILLING WELLS AND RIGS**

**BOLING**
**Rig**

Chase, Gulf Prod. 1.

**Wells Drilling**

Farmer, The Texas Company 2.
Felder, The Texas Company 2.
Farmer, The Sun Co. 2.
Marchsion, West & Gayle 6.
Rigs, 1; wells drilling, 4; total, 5.

**BATSON**
**Rigs**

Milhome, S. R. Buchanan 92.
Haywood, Ada Belle Oil 34.
Deutser, Colo. and Batson Oil 1.

**Wells Drilling**

Hodges, Kirby-Capital Oil 7.
LaJarza, The Texas Company 3.
Cruse, Gulf Prod. 2.
Wing, Gulf Prod. 170.
Crawford, East Batson Oil 1.
Rigs, 3; wells drilling, 5; total, 8.

**BIG CREEK**
**Rig**

Davis, Gulf Prod. 2.

**Wells Drilling**

Davis, Gulf Prod. 38, 39.
J. H. P. Davis, Gulf Prod. 1.
Fee, The Texas Company 3.
Rigs, 1; wells drilling, 4; total, 5.

**BLUE RIDGE**
**Rigs**

West-Schenck, J. S. Abercrombie Co. 3.
Blakely, Gulf Prod. 15.

**Wells Drilling**

Robinson, J. S. Abercrombie Co. 1.
Robinson, Navarro Oil 1-A.
West-Schenck, Gulf Prod. 8, 9.
West-Schenck, Humphrey Corp. 2.
Blakely, Gulf Prod. 9.
Invincible, Gulf Prod. 4.
Rigs, 2; wells drilling, 7; total 9.

**BARBER HILL**
**Rig**

Kirby, Humphrey Corp. 3.

**Wells Drilling**

Barber, Humphrey Corp. 3.
Barber, Barclay & Meadors 5.
Rigs, 1; wells drilling, 2; total 3.

**EDGERLY**
**Rig**

Hunter, Rex Pet. 5.

**Wells Drilling**

Lilliard, C. M. Crotty 3.
Lilliard, Edgerly Pet. 3.
Rigs, 1; wells drilling, 2; total, 3.

**GOOSE CREEK**
**Rigs**

None.

**Wells Drilling**

Smith, Humble Oil & Ref. 56, 70.
Smith, Gulf Prod. 26.
Peninsula, Humble Oil & Ref. 17, 31, 32.
Chapman-Bryan, Gulf Prod. 13.
Beaumont Pet., Gulf Prod. 32.
Rigs, 0; wells drilling, 8; total, 8.

**HUMBLE**
**Rig**

Stevenson, Galena-Signal Oil 21-A.

**Wells Drilling**

Hirsch, Benedum & Trees 1.
Parker, Woods & Bennett 3.
Burt, Atlantic O. P. 1.
———, Marsailes Brothers 5.
Cherry, Webb Oil 23.
Rigs, 1; wells drilling, 5; total, 6.

**HULL**
**Rigs**

Baldwin, Gulf Prod. 19.
Phoenix, Gulf Prod. 85.
Riviere, W. B. Flynn 2.

**Wells Drilling**

Dolbear, Republic Prod.-Houston Oil 10, 33 wo.
Crosbie, Cannon & Davis 1 (dpng.).
Hannah, The Texas Company 1, 2.
Barngrover, Empire Gas & Fuel 24.
Phoenix, Gulf Prod. 83, 84.
Harrison, Hull Oil 2 (dpng.).
Rigs, 3; wells drilling 9; total, 12.

**HIGH ISLAND**
**Rigs**

None.

**Wells Drilling**

Smith, Gulf Prod. 3, 7.
Cade, Sun Co. 9-C, 11.
Lockhart, Sun Co. 12.
Rigs, 0; wells drilling, 5; total, 5.

**JENNINGS**
**Rig**

S. F. S., Port City Oil 7.

**Wells Drilling**

Rayne, The Texas Company 1.
Latrielle, The Texas Company 103 (dpng.).
Pierce, Mountain Oil 2.
Conklin, Cline & Son 5 (dpng.)
Rigs, 1; drilling, 4; total, 5.

**MARKHAM**
**Rigs**

None.

**Wells Drilling**

Kountz, Rycade Pet. 5.
Gray, Rycade Pet. 5.
Rigs, 0; wells drilling, 3; total, 3.

**NASH POOL**
**Rig**

Mier, Rycade Pet. 4.

**Wells Drilling**

Flessner, Rycade Pet. 7.
Nash, Rycade Pet. 9.
Schnitz, Rycade Pet. 1.
Rigs, 1; wells drilling, 3; total, 4.

**ORANGE**
**Rig**

Chesson, Orange Pet. 6.

**Wells Drilling**

Carbello, Rex Pet. 8.
Winifree, Orange Pet. 7.
Winifree, Humble Oil & Ref. 8.
Chase, Gulf Prod. 1.
Rigs, 1; wells drilling, 4; total, 5.

**ORCHARD**
**Wells Drilling**

Moore, Gulf Prod. 10, 11.
Wells drilling, 2.

**PIERCE JUNCTION**
**Rigs**

Humble, Navarro Oil 2.
Prudential, Marland Oil 4.
Liggett, Humphrey Corp. 2.
Sanders, Gulf Prod. 1.

**Wells Drilling**

Cain, Navarro Oil 3-A (dpng.).
Settegast, Rio Bravo Oil 3, A-3, TF.
Bender, Rio Bravo Oil 3, 6.
Dooley, Texas Exploration 10.
Jones, M. Kouri 2.
Settegast, W. F. Martin Co. 1.
Howe, H. R. Cullen 8.
Parson, Smith and others 1.
Jones, Gulf Prod. 2.
Taylor, Gulf Prod. 20.
Rigs, 4; wells drilling, 10; total, 14.

**PIEDRAS PINTAS**
**Wells Drilling**

Tinney, Gulf Prod. 2.
Tinney, Humble Oil & Ref. 3.
———, Magnolia Pet. 1 sd.
Wells drilling, 3.

**SPINDLETOP**
**Rigs**

McLean, Atlantic O. P. 16, 17.
Parker, Hines & Co. 2.
Quinn, Plummer Oil 1.
Tyrell, Walker Oil 1, 2.
Fee, Magnolia Pet. 3.
Gladys, Kinnear Oil 1.
Gladys, J. O. Davis 1.
Gordon, Hines and others 2.
Gladys, Gulf Prod. 223.

**Wells Drilling**

McLean, Atlantic Oil Prod. 1, 5, 10, 11 sd.
Brush, Deep Sands Oil 1.
McLean, Sun Co. 2, 3, 4.
T. & N. O., Rio Bravo Oil 58, 101.
Weed, Turnbow Oil 1 sd.
Banks, Turnbow Oil 1 sd.
Quinn, Walker Oil 1.
Gordon Hines and others 1.

Weed, Gulf Prod. 12-A.
Oakwood, Gulf Prod. 9.
Mann, Gulf Prod. 5.
Jack & Duff, Gulf Prod. 2.
Rigs, 11; wells drilling, 18; total, 29.

**SARATOGA**
**Rigs**
Cotton, Rainbow Oil 1.
Texas, Sun Co. 173.
Ogden, Elizabeth Oil 1.
**Wells Drilling**
Brooker, Skinner Oil 2.
Rigs, 3; wells drilling, 1; total, 4.

**SOUR LAKE**
**Rigs**
Merchant, Orange Pet. 4.
Fee, Minor Oil 81.
**Wells Drilling**
Jackson, Gulf Prod. 5.
Ebberts, Gulf Prod. 4.
Thompson, Gulf Prod. 2.
Carpenter, Sun Co. 1.
Gordon, Humphrey Corp. 1.
Rigs, 2; wells drilling, 5; total, 7.

**SOUTH LIBERTY**
**Rigs**
None.
**Wells Drilling**
Simms, The Texas Company 4 (dpng.).
Welder, Humble Oil & Ref. 7.
Hirsch-Conley, Associated Oil 1.
Palmer, Gulf Prod. 1.
Bingle, Gulf Prod. 1.
Rigs, 0; wells drilling, 5; total, 5.

**VINTON**
**Rig**
Gray, Vinton Pet. 39.
**Wells Drilling**
Gray, The Texas Co. 27.
Gray, Marrs McLean 4 (dpng.).
Vincent, Edgerly Pet. 11.
Rescue, Vinton Pet. 6.
Star, Gulf Ref. 41.
Rigs, 1; wells drilling, 5; total, 6.

**WEST COLUMBIA**
**Wells Drilling**
Eyre, Gulf Prod. 9.
Hogg, The Texas Company 51.
Wells drilling 2.

**MISCELLANEOUS**
**COASTAL TEXAS**
**AUSTIN COUNTY**
**Rigs**
Austin College, Humble O. & R. and Valley Oil 2.
Reese, Humble Oil & Ref. and Valley Oil 2.
Thompson, Humble Oil & Ref. and Valley Oil 2.
**Wells Drilling**
Walton, Humble Oil & Ref. and Valley Oil 1 (dpng.).
Bellville, Humble Oil & Ref. and Valley Oil 1.
Hickory Mound, E. R. Graves 1.
Rigs, 3; wells drilling, 3; total, 6.

**BRAZOS COUNTY**
**Wells Drilling**
Iola, Rassmussen and others 2.
Bryan, Bryan Pet. 1 (sd).

**BRAZORIA COUNTY**
**Rigs**
Stratton Ridge: Armstrong, Pure and Humphrey Corp. 1.
Seaburn, Associated Oil 1.
Clemons Dome: Reese, Roxana Pet. 1.
Hunt, The Texas Company 1.
**Wells Drilling**
Clemons Dome: Pabst, Roxana Pet. 1-A.
Clemons, Roxana Pet. 4.
Allen Dome: Allen, Roxana Pet. 3.
Stratton Ridge: Perry, Gulf Prod. 1.
Sweeney, The Texas Company 1.

**FORT BEND COUNTY**
**Wells Drilling**
Long Point Dome: Trone, Gulf Prod. 1.
Davis, Gulf Prod. 22, 23.
Beard, Gulf Prod. 3.

**GOLIAD COUNTY**
**Wells Drilling**
Pettus, Houston Oil 1.
Parks, Houston Oil 2.

**JEFFERSON COUNTY**
**Rigs**
Fannette Dome: Bordages, Gulf Prod. 3.
Nederland, Edwards Oil 1.
Near Port Arthur, Edmunds and others 1.
**Wells Drilling**
Fannette Dome: Gulf Prod. 2 (wo).
Roberts, Deep Test Oil 1.

**LIBERTY COUNTY**
**Rig**
Mincliffe, Barlow and others 1.
**Wells Drilling**
Moss Bluff Dome: Kyle, Union Sulphur Co. 4.
Cleveland, Local parties 1.

**HARRIS COUNTY**
**Rigs**
Hockley Dome: Warren, Rycade Pet.-Humble 1.
Tomball, Brain and others 1.
Kitman, Juniata Oil 1.
**Wells Drilling**
Fee, P. S. Griffith 1.
Spring, Brain and others 1.

**MATAGORDA COUNTY**
**Wells Drilling**
Hawkins Dome: Sanborn, Gulf Prod. 1.
Parkinson, Gulf Prod. 1.
Craig, Gulf Prod. 8.
Murphy, Shepherd Mott Oil 1.

**WHARTON COUNTY**
**Well Drilling**
———, Dome Dev. Co. 1 (sd).

**VICTORIA COUNTY**
**Well Drilling**
Reeves, R. M. Talbot, Inc., 1.

**REFUGIO COUNTY**
**Rigs**
Fox, Houston-Gulf Gas 2.
Lambert, Houston Gulf Gas 1.
Heard, Houston Oil 9.
**Wells Drilling**
Breeding, Houston Gulf Gas 1.
Shelly, W. F. Morgan 1.
Rogers, W. F. Morgan 1.

**SABINE COUNTY**
**Well Drilling**
Pratt, Chester Oil 1.

**SHELBY COUNTY**
**Well Drilling**
Pickering, Avalona Oil 1.

**COASTAL LOUISIANA**
**CAMERON PARISH**
**Rigs**
Sabine Lake, Border Research 1.
Little, Union Sulphur 1.
Sweet Lake, Pure Oil 3.
**Wells Drilling**
Hackberry Dome: School land, Yount Lee Oil 5.
Gulf land, Union Sulphur 1.
Bell, Union Sulphur 1.
Vincient, Union Sulphur 1.
Mallard Bay, Border Research 1 (sd).

**CALCASIEU PARISH**
**Rig**
Stark Dome: Lutcher, Standard of La. 1.
**Wells Drilling**
Stark Dome: Gulf, Ref. 5.
Sulphur Mines, Union Sulphur 720 (dpng.).

**IBERIA PARISH**
**Rigs**
Shaw, Union Sulphur 1-A.
Vermillion Bay, Border Research 1.
Salt Mine, Jefferson Oil & Gas 1.
**Wells Drilling**
Eagle Point Dome: State land, Gulf Ref. 1.
Eagle, Gulf Ref. 1.
Near New Iberia, Calcasieu Oil 1.

**JEFF DAVIS PARISH**
**Wells Drilling**
Le Deux, Estropal Oil 1.
Comier, Emmerson and others 1.
Bullard, Elton Oil 1 (sd).
La Cosine, F. J. Getty's 1 (sd).

**ASSUMPTION PARISH**
**Rig**
Bank of Paincourt, Union Sulphur 2.

**EVANGELINE PARISH**
**Well Drilling**
Pine Prairie Dome: Guillory, The Texas Company 1.

**ST. MARY PARISH**
**Rig**
West Cote Blanche, Border Research Co. 1.
**Well Drilling**
Grand Lake, Border Research Co. 1.

**ST. LANDRY PARISH**
**Wells Drilling**
Whitman, Terre Bonne Gas 1 (sd).
Breaux, Bristol Oil & Gas 1 (sd).

**ST. MARY PARISH**
**Wells Drilling**
Martin, Ohio Oil 3 (sd).
Atchalfaya, Rycade Pet. 1 (sd).
Total rigs, 26; total wells drilling, 51; grand total, 77.

## LOUISIANA-ARKANSAS

### LOUISIANA

**Summary of Field Operations**

| Parish— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Bossier | 2 | 12 | 0 | 1 | 2 | 10 | 12 |
| Caddo | 19 | 724 | 2 | 3 | 10 | 33 | 43 |
| Claiborne | 3 | 0 | 3 | 0 | 0 | 3 | 3 |
| DeSoto | 2 | 15 | 0 | 0 | 0 | 3 | 3 |
| Grant | 5 | 0 | 5 | 0 | 4 | 2 | 6 |
| LaSalle | 4 | 390 | 1 | 0 | 0 | 3 | 3 |
| Monroe Dist. | 9 | * | 1 | 8 | 3 | 8 | 11 |
| Natchitoches | 1 | 0 | 1 | 0 | 2 | 3 | 5 |
| Red River | 0 | 0 | 0 | 0 | 1 | 3 | 4 |
| Richland | 1 | 0 | 1 | 0 | 2 | 9 | 11 |
| Sabine | 1 | 513 | 0 | 0 | 4 | 3 | 7 |
| Webster | 3 | 0 | 2 | 1 | 2 | 6 | 8 |
| Winn | 2 | 0 | 2 | 0 | 2 | 3 | 5 |
| Miscl. | 5 | 0 | 5 | 0 | 1 | 3 | 4 |
| Total Feb. | 57 | 1,654 | 23 | 13 | 33 | 92 | 125 |
| Total Jan. | 54 | 1,752 | 19 | 7 | 29 | 110 | 139 |
| Difference | 3 | 98 | 4 | 6 | 4 | 18 | 14 |

*Gas.

### ARKANSAS

**Summary of Field Operations**

| County— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Union | 17 | 636 | 2 | 4 | 15 | 35 | 50 |
| Ouachita | 7 | 75 | 1 | 3 | 1 | 15 | 16 |
| Columbia | 1 | 0 | 1 | 0 | 1 | 4 | 5 |
| Nevada | 3 | 45 | 2 | 0 | 1 | 6 | 7 |
| Miscl. | 1 | 0 | 1 | 0 | 0 | 4 | 4 |
| Total Feb. | 29 | 756 | 7 | 7 | 18 | 64 | 82 |
| Total Jan. | 32 | 517 | 16 | 2 | 19 | 63 | 82 |
| Difference | 3 | 39 | 9 | 5 | 1 | 1 | 0 |

**WELLS COMPLETED**
**BOSSIER PARISH**
28-23-11 Bollinger, Oil Fields Gas Co. 3 ..... gas
19-16-11 Hodges, Gulf Ref Co. 19 .... 12

Wells completed ..... 2
Production ..... 12
Dry ..... 0
Gas ..... 1

**CADDO PARISH**
33-21-16 Levee Board, The Texas Company 67 ..... 50
14-17-14 Fee, Magnolia Pet. 1 ..... gas
31-21-15 Muslow, Thomason et al 6 ... 15
14-20-15 Glassell, The Texas Company 1 ..... gas
14-20-15 Wemple, Mag. Pet. Co. 4 .... 100
15-20-15 Thigpen, The Texas Company 1 ..... 25
32-21-15 Muslow, Woodley Pet. Co 2 .. 15
18-21-15 Caldwell, J. W. Burton 6 .... 6
36-21-16 Caddo Levee Board, Empire Gas & Fuel Co. 1 ..... 30
22-21-15 Raines, Mag. Pet. Co. 25 .... 15
9-17-16 Florsheim, Owl Oil Co. 3 .... gas
10-21-16 Thigpen & Herold, Unity Pet. Co. 1 ..... dry
28-20-16 Ferry Lake, Gulf Ref. Co. 263. 131
15-20-15 Noel, Dixie Oil Co. C-1 ..... dry
21-22-15 Barker, O. D. Cravath 1 ..... 7
14-20-15 Curtis, The Texas Company 5 ..... 250
14-21-15 Robertshaw, Dixie Oil Co. 82. 15
23-22-15 Caddo Levee Board, Luby Oil Co. 13 ..... 20
33-21-16 Caddo Levee Board, The Texas Company 68 ..... 45

Wells completed ..... 19
Production ..... 724
Dry ..... 2
Gas ..... 3

**CLAIBORNE PARISH**
8-20- 7 Bullock, Underwood et al 1 .. dry
29-21- 7 Guy Oakes, Standard Oil Co. 16 ..... dry
19-22- 6 Cheatham, Root Ref. Co. 1 ... dry

Wells completed ..... 3
Production ..... 0
Dry ..... 3

**DESOTO PARISH**
12-11-16 Willingsley, Clark & Melat 1. 5
32-12-11 Matthews, A. H. Tarver B-2 .. 10

Wells completed ..... 2
Production ..... 15

**GRANT PARISH**
8- 9-1e Swope, Gulf Ref. Co. A-1 .... dry
16- 8-3w L. & A., Tunica Pet. Co. 22 ... dry
6- 9-1e Backshear, Ayers et al 1 .... dry
1- 8-3w L. & A., Tunica Pet. Co. 21 ... dry
4- 7-4w Calhoun, J. J. Long et al 1 ... dry

Wells completed ..... 5
Production ..... 0
Dry ..... 5

**LASALLE PARISH**
2- 9-1e Tremont, La. Oil Ref. Corp. C-4 ..... 40
26-10-1e Morrow, Shreveport Oil Corp. 1 ..... abd
23- 8-1e White Sulphur, Jena Oil Corp. 1 ..... dry
19-10-2e Urania, Taylor trustee 5 ..... 50
2- 9-1e Urania, Wingfield et al 4 .... 300

Wells completed ..... 5
Production ..... 390
Dry ..... 1
Abandoned ..... 1

**MONROE DISTRICT**
1-19-1e Fee, Ladell et al 35 ..... gas
12-18-4e Ouachita, Jordan Drlg. Co. 1 .. gas
26-20-5e Luber, Dickenson et al 1 .... gas
37-20-4e Smith, Ouachita Gas Co. 6 ... gas
8-19-8e Interstate, Standard Oil Co. 3 ..... dry
50-20-4e Guthrie, United Oil and Gas Co. 3 ..... gas
9-20-5e Milsaps, Natural Gas Products Co. 1 ..... gas
1-18-4e Edwards, J. M. Huber 3 ..... gas
36-20-4e La. Dev. Co., New Process Carbon Black Co. 1 ..... gas

Wells completed ..... 9
Production ..... 0
Dry ..... 1
Gas ..... 8
Gas production ..... 120,750,000

**NATCHITOCHES PARISH**
26- 6-8w L. L. L. Co., Humble Oil & Ref Co. 8-A ..... dry

**RICHLAND PARISH**
2-17-8e Chess-Wymond, Gulf Ref. Co. 3 ..... dry

**SABINE PARISH**
33-10-12 Logan Oil Co., Ark. Fuel Oil Co. 1 ..... 513

**WEBSTER PARISH**
21-21-10 Turner, Mag. Pet. Co. B-4 ... dry
30-23- 9 Pickett, Ohio Oil Co. 1 ..... gas
17-19-10 Hudson, J. R. Garrison 1 .... dry

Wells completed ..... 3
Production ..... 0
Dry ..... 2
Gas ..... 1

**WINN PARISH**
19-10-1w L. & S., Humble Oil & Ref. Co. A-18 ..... dry
19-10-1w Tremont, Humble Oil & Ref. Co. B-1-A ..... dry

Wells completed ..... 2
Production ..... 0
Dry ..... 2

**MISCELLANEOUS**
9-12-6e Blue, Ark. Fuel Oil Co. 2 .... dry
9-12-7e Gilbert, Ark. Fuel Oil Co. 1.. dry
3-14-4w Jones, ElDorado Chief Oil Co. 1 ..... dry
51-16-14 Yeager, Eannion et al 1 ..... dry
53-18-13 Henderson, T. A. Snell 1 .... dry

Wells completed ..... 5
Production ..... 0
Dry ..... 5

**ARKANSAS**
**WELLS COMPLETED**
**UNION COUNTY**
9-16-15 Bilyew, Natural Gas & Fuel Corp. 7 ..... gas
3-16-15 Graves, So. Crude Oil Purchasing Co. 10 ..... dry
9-16-15 Mabry, Keen & Woolf Oil 2 .. 50
17-16-15 Harrell, Natural Gas & Fuel Corp. A-4 ..... dry
28-17-16 Harper, Ohio Oil Co. 2 ..... 8
5-16-15 Flenniken, Roxana Pet. Corp. B-5 ..... 125
10-16-15 Lawton, A. H. Ramage C-10 .. 50
28-17-16 Werner, Lion Oil & Ref. Corp. 7 ..... 5
1-16-16 McDonald, F. A. Book 1 ..... dry
20-17-16 Patterson Mitchell, Ohio Oil Co. 1 ..... 15
20-17-16 Goodwin, Humble Oil & Ref. Co. 5 ..... 15
6-18-15 LeCroy, Clark & Greer 1 .... 8
34-15-15 Farris, Humble Oil & Ref. Co. 6 ..... gas
9-16-15 Murphy, Imperial Oil & Gas Co. 9 ..... 125
10-16-15 Lawton, Lion Oil & Ref. Co. A-10 ..... 150
6-18-13 Dennie, Phillips Pet. Co. 1 ... dry
9-16-15 Murphy, Lion Oil & Ref. Co. H-3 ..... 85

Wells completed ..... 17
Production ..... 636
Dry ..... 4
Gas ..... 2

**OUACHITA COUNTY**
2-13-18 Mamolith, Brown & Sheppard 1 ..... dry
28-15-15 Murphy, Roxana Pet. Corp 5. 50
28-15-16 Hughes, A. Meek 8 ..... dry
36-15-17 La Grone, Magnolia Pet. 7 ..... 3
22-15-19 Culp, Buffalo Oil Co. 2 .... 20
8-11-17 Moline Timber, Segraves & Mooty 1 ..... dry
5-16-15 Hill, Natural Gas & Fuel Corp. A-5 ..... gas

Wells completed ..... 7
Production ..... 75
Dry ..... 3
Gas ..... 1

**COLUMBIA COUNTY**
29-19-20 Peter Doss, Ky.-Ark. Pet. Co. ..... dry

**NEVADA COUNTY**
11-20-20 Adams, Prescott Oil Corp. 1 .. dry
1-14-21 Ellis, Humble Oil & Ref. Corp. C-3 ..... 61
9-14-21 Atkins, Humble Oil & Ref. Corp. 1 ..... dry

Wells completed ..... 4
Production ..... 61
Dry ..... 2

**MISCELLANEOUS**
7-17- 5 Fee, Pine Prairie Oil Co. 1 ... dry

**Wells Drilling**
**BOSSIER PARISH**
**Rigs**
23-23-12 Blanton, La. Oil Ref. Corp. 1.
24-16-12 Caplis, The Texas Company 14.
**Wells Drilling**
27-23-12 Mays, Bahan et al 1.
16-23-12 Dodson, Bethany Oil & Gas Co. 1.
32-23-13 Ford, Clark & Norton 1.
10-22-11 Thomas, Doern et al 1.
24-16-12 Hodges, Gulf Ref. Co. 6.
2-18-12 Adkinson, Harrel Drlg. Co. 1.
38-23-11 Bollinger, Oil Fields Gas Co. 4.
9-16-11 Bossier L. & L. Co., Palmer Corp. 3.
24-16-12 Caplis, The Texas Company 5.
14-23-12 L. & A., Woodley & Collins 2.
**Shut Down**
9-26-13 Bulkley, Anderson & West 1.
23-18-11 Jones, E. A. Bloomquist 2.
24-17-12 Aaron Jeter, Sligo Syndicate 1.
26-20-13 Jacobs, Tubbs et al 1.
Rigs, 2; wells drilling, 14; total, 16.

**CADDO PARISH**
**Rigs**
35-23-16 Payne, Ackerman et al 1.
4-17-16 Wilburn, Bahan & Bahan 2.
13-21-15 Robertshaw, Dixie Oil Co. 84.
24-22-15 C. M. L. Co., Lewis Oil Corp. 9.
24-21-15 Dillon, Mag. Pet. Co. 18.
28-21-15 Murray, Ohio Oil Co. 3.
28-21-15 State, Shreveport Oil Corp. 1.
23-22-15 Allen, Standish Oil & Ref. Co. 11.
22-21-15 Herndon, The Texas Company 6.
15-20-15 Thomas, Victor Wenzell 3.
**Wells Drilling**
1-20-16 Offenhauser, Bethany Oil & Gas Co. 1.
23-23-16 Rodessa, Big Lake Oil Co. 1.
13-21-15 Noel, Dixie Oil Co. A-2.
13-21-15 Robertshaw, Dixie Oil Co. 81.
14-21-15 Robertshaw, Dixie Oil Co. 83.
27-21-15 Slattery, Dixie Oil Co. 10.
17-21-14 Sellington, Gilliam Syndicate 1.
28-20-16 Ferry Lake, Gulf Ref Co. 262, 265.
22-20-16 Ferry Lake, Gulf Ref. Co. 264.
24-22-15 C. M. L. Co., Lewis Oil Corp 8.
23-22-15 Caddo Levee Board, Luby Oil Co. 14.
6-17-16 Bell, Mag. Pet. Co. 1.
8-20-15 Caddo Levee Board, Mag. Pet. Co. 2.
24-21-15 Dillon, Mag. Pet. Co. 16.
6-20-15 Doan-Thigpen, Magnolia Pet. 16.
22-21-15 Herndon, Mag. Pet. Co. 13.
7-21-14 Planters, Mag. Pet. Co. 4.
23-21-15 Robertshaw, Mag. Pet. Co. 20.
22-21-15 Solly, J. M. Miller 6.
4-17-16 Wilburn, Owl Oil Co. 2.
23-21-15 C. M. L. Co., The Texas Company 47.
14-20-15 Glassell, The Texas Company 2.
14-21-15 Herndon, The Texas Company 5.
15-15-12 Hutchinson, The Texas Company 3.
4-21-16 Harrell, The Texas Company 56, 58.
32-21-15 Edson, Tholl Oil Co., 1.
31-21-15 Muslow, Tholl Oil Co. 2.
31-21-15 Muslow, Thomason et al 7.
15-20-15 Hunsicker, Victor Wenzell 4.
19-17-16 Stringfellow, West La. Gas Co. 2.
32-21-15 Muslow, Woodley Pet. Co. 3.
**Shut Down**
2-20-16 Dambley, Burford et al 1.
8-20-16 U. S., Camp Oil Co. 1.
14-20-15 Wemple, Gulf Ref. Co. 3.
8-19-16 L. L. S. & P. Co., Haynes Brothers 1.
13-20-15 Youree, Murphy et al 1.
34-18-16 Trosper, Standard Oil Co. 1.
Rigs, 10; wells drilling, 39; total, 49.

**CLAIBORNE PARISH**
**Wells Drilling**
16-22- 8 Lee, Mag. Pet. Co. 1.
23-19- 7 Wilburn, Mitchell & Janson 1.
29-21- 7 Mitchell, Standard Oil Co. 1.
**Shut Down**
28-19- 5 Beard, Brown et al 1.
Rigs, 0; wells drilling, 4; total, 4.

**DESOTO PARISH**
**Wells Drilling**
9-12-11 Jenkins, Dixie Oil Co. 1.
28-12-11 Mason, Mag. Pet. Co. 1.
7-11-11 Lanier O. & L. Co., Snapp et al 1.
**Shut Down**
27-14-13 Riggs, Graize & Hintze 1.
28-11-12 Joyner, Helm & Jarman 1.
Rigs, 0; wells drilling, 5; total, 5.

**GRANT PARISH**
**Rigs**
17- 9-1e Holmes, Holmes et al 2, 3, 1-A.
20- 9-2w L. & A., Humble Oil & Ref Co. A-11.
**Wells Drilling**
17- 9-1e L. C. Swope, Gulf Ref. Co. A-2.
8- 9-1e L. C. Swope, Gulf Ref. Co. A-3.
**Shut Down**
19- 7-1e Vall, E. H. Billeaud 1.
20- 9-1e Holmes, Word & Phelps 1.
Rigs, 4; wells drilling, 4; total, 8.

**LASALLE PARISH**
**Wells Drilling**
35-10-1e Morrow, Honeycutt et al 1.
30-10-2e Tremont, La. Oil Ref. Corp. B-2.
7-10-2e Urania, Youngblood et al 1.
**Shut Down**
6-10-2e Dawson, Hog Creek Oil Co. 1.
Rigs, 0; wells drilling, 4; total, 4.

**MONROE DISTRICT**
**Rigs**
21-20-5e Fee, Louisiana Dev. Co. 38.
18-18-4e Sicard, Easterling et al 1.
26-20-4e Burton, Natl. Gas Prod. Co. 1.
**Wells Drilling**
7-20-5e Allison, Ouachita Natl. Gas Co. 8.
13-18-4e Montgomery, Jordan Drlg. Co. 1.
10-19-5e Fee, Ladell Oil Prop. Inc. 37.
26-20-4e Burton, Natl. Gas Prod. Co. 1.
21-22-1e Tugurie, C. E. Camette 1.

7-26-4w Trimble, Natl. Gas Prod. Co. 1.
16-26-4e Gulley, Ruston Drlg. Co. 1.
25-21-4e Raburn, United Carbon Co. 1.
**Shut Down**
25-18-2e D'Arbone, Ouachita Natl. Gas Co. 2.
8-23-1e Frost-Johnson, Clark Creek Oil Co. 2.
28-23-2e Hutch, R. W. Rhodes 1.
Rigs, 3; wells drilling, 11; total, 14.

**NATCHITOCHES PARISH**
**Rigs**
34-10-7w Long, Three League Oil Co. 1.
28-11- 7 Brown, Wenzel et al 1.
**Wells Drilling**
23- 5- 6 Clark & Morse, Lawson & Pharris 1.
29-13-6w L. & A., Ohio Oil Co. 1.
25- 7-7w Frost Lumber Co., Weaver Bros. 1.
**Shut Down**
4-11- 6 Edenborn, J. F. Palmer 1.
Rigs, 2; wells drilling, 4; total, 6.

**RED RIVER PARISH**
**Rigs**
16-12- 8 Long Bell Co., Phillips Pet. Co. 1.
**Wells Drilling**
13-11-10 Powell, Alden Oil Co. 1.
7-12-10 Foursome, Mag. Pet. Co. 14.
26-13-10 Brinkenhoff, The Texas Company 35.
**Shut Down**
23-13-10 Posey, S. M. Cagle 1.
Rigs, 1; wells drilling, 4; total, 5.

**RICHLAND PARISH**
**Rigs**
22-16-7e Delta Hardwood Co., Standard Drlg. Co. 1.
29-17-6e Mitchell, Stovall Drlg. Co. 1.
**Wells Drilling**
30-17-6e Mansfield, Gulf Ref. Co. 1.
36-17-5e Wynn, Gulf Ref. Co. 1.
2-18-6e McCoy, S. D. Hunter 1.
1-16-5e Siebert, S. D. Hunter 1.
22-17-6e Hicks, La. Pet. Co. 1.
2-18-5e Hatch, Oliver & Masters 1.
33-17-6e Colvin, Palmer Corp. 1.
35-17-6e O'Neal, Ruston Drlg. Co. 1.
1-16-6e Broughton, Tex.-La. Carbon Co. 1.
**Shut Down**
3-17-9e Hawley, Aarnes et al 1.
Rigs, 2; wells drilling, 10; total, 12.

**SABINE PARISH**
**Rigs**
28-10-12 Logan, Ark. Fuel Oil Co. 2.
33-10-12 Logan, Ark. Fuel Oil Co. 3.
8- 7-13 Sabine Lbr. Co., L. M. Emlet 1.
34-10-12 Cook, Ohio Oil Co. 1.
**Shut Down**
**Wells Drilling**
14- 7-14 Bowman, L. M. Emlet 7.
11- 6-11 L. L. L. L. Co., Mag. Pet. Co. 1.
23- 5-12 Wyatt, Lewis & Clark Pet. Co. 1.
9- 7-12 Bowman, L. M. Emlet 5.
8- 7-12 Bowman, L. M. Emlet 6.
35- 5-13 Gigaue, Godchaux et al 1.
Rigs, 4; well drilling, 6; total, 10.

**WEBSTER PARISH**
**Rigs**
21-21-10 Robins, Mag. Pet. Co. A-2.
22-21-10 Bank of Cotton Valley, Ohio Oil Co. 2.
**Wells Drilling**
22-22- 9 Lee, M. E. Davis et al 1.
23-21-10 Davis, Humble Oil & Ref. Co. B-5.
21-21-10 Robins, Mag. Pet. Co. A-4.
7-21-10 Davis, La. Oil Ref. Corp. 1.
22-21-10 Bank of Cotton Valley, Ohio Oil Co. 1.
22-21-10 Cox, Woodley Pet. Co. 1.
**Shut Down**
30-19-10 Bruner, I. J. Laborde 1.
Rigs, 2; wells drilling, 7; total, 9.

**WINN PARISH**
**Rigs**
26-11-1e Urania, Rowe et al 1.
27-10-1e Albritton, Liggett et al 1.
**Wells Drilling**
35-13-3w Tremont, Dodge & Cordell 1.
4-12-1w Edenborn, Ohio Oil Co. 2.
1-12-2w Tremont, Standard Oil Co. 1.
**Shut Down**
27-10-1e Albritton, Cherokee Pet. Co. 1.
9-11-4w Bodcaw, Greer & Gault 1.
28-13-3w Milan, J. C. Long 1.
27-10-1e Albritton, D. A. Shannon 1.
Rigs, 2; wells drilling, 7; total, 9.

**MISCELLANEOUS**
**Rigs**
21- 9-7e Tensas Delta, S. D. Hunter 2.
**Wells Drilling**
27-15- 8 Cargle, Kimbrough et al 1.
26- 9-6e Beasley, Lochnager Oil & Gas Co. 1.
12-11-6e Moore, Exploration Co. 1.
**Shut Down**
24-14-2e Shaw, E. V. Wenzel 1.
20-13-7e Duncan, Hall & Harrell 1.
3-15-7e Baker, Robinson & Long 1.
5-15-1e Martin, Charles A. Ferguson 1.
22-17-4w Adams, Grigsby & Co. 1.
34-15-3w Horton, Clarence Houseman 1.
22-16-4w Davis, La. Pet. Co. 3.
29- 5-2e Barrow, Hincey & Macke 1.
7- 5-3w Wettermark, Minn. Oil Corp. 1.
12- 4-1e Voda, Libuse Oil & Gas Co. 1.
3- 4-3e Lanier Oil & Lbr. Co., Wheeler & Wilbanks 1.
13-11-10 Powell, Alden Oil Co. 1.
Rigs, 1; wells drilling, 15; total, 16.

**UNION COUNTY**
**Rigs**
1-16-17 Lagrone, Ark. Fuel Oil Co. 8.
20-17-16 Goodwin, Humble Oil & Ref. Co. 6.
26-17-16 Goodwin, Imperial O. & G. Co. 1.
9-16-15 Murphy, Imperial O. & G. Co. 5.
9-16-15 Murphy, Keen & Woolf Oil Co. 4.
8-16-15 Murphy, La. Oil Ref. Corp. B-3.
10-16-15 Lawton, E. M. Jones 2-A.
8-18-15 Pratt, Mounts et al 6.
15-17-16 Milner, J. L. Meeks 2.
9-16-15 Murphy, O. G. Murphy 3.
9-16-15 Murphy, Natl. Gas & Fuel Corp. F-1.
9-16-15 Murphy, Ohio Oil Co. 7.
15-17-16 Harrell, Rovenger Oil Corp. 4.
32-17-13 Jerry, Superior Oil Co. 1.
15-19-13 Greer, Wingfield et al 1.
**Wells Drilling**
8-16-16 Fee, G. J. Childs, A-1.
15-16-15 Murphy, Eason et al A-9.
1-16-17 Hodges, W. H. Gilliland B-1.
16-16-15 Cook, Gladys Belle Oil Co. 11.
8-18-14 Williams, Grimes & Jones 1.
23-17-16 Ennis, Hatfield et al 3.
10-16-15 Giller, Hollifield et al 8.
10-16-15 Giller, Hollifield et al 17.
9-16-15 Murphy, Imperial Oil & Gas Co. 6.
17-16-15 Murphy, E. M. Jones 4.
10-16-15 Flenniken, Lion Oil & Ref. Co. A-9.
3-16-15 Graves, Lion Oil & Ref. Co. 9.
9-16-15 Hardy Murphy, Lion Oil & Ref. Co. 5.
8-16-15 Murphy, Lion Oil & Ref. Co. D-7.
8-16-16 Childs, Mag. Pet. Co. 5.
7-16-15 Hatfield, Mag. Pet. Co. 10.
8-16-16 Nicholas Childs, Mag. Pet. Co. 1.
10-18-13 Thompson, Marine Oil Co. 1.
11-18-13 Winn, Marine Oil Co. 1.
17-16-15 Vestel, Murdock et al 1.
9-16-15 Murphy, O. G. Murphy 9.
9-16-15 Bilyew, Natl. Gas & Fuel Corp. 5.
8-16-15 Flenniken, Natl. Gas & Fuel Corp. 4.
1-17-14 Crain, Ohio Oil Co. 1.
9-16-15 Palmer, Peer Oil Corp. B-7.
10-16-15 Lawton, A. H. Ramage C-11.
10-16-15 Lawton, Sam Richardson 4.
14-16-15 Murphy, Sam Richardson M-2.
10-16-15 Flenniken, Roxana Pet. Corp. A-1.
-16-16 Fee, C. L. Saxon 3.
9-18-13 Ballard, Simms Oil Co. 1.
3-16-15 Hays, Sun Oil Co. 20.
9-16-15 Murphy, Stewart et al 7.
4-16-16 Saxon, The Texas Company 5.
3-19-13 Morrison, Wingfield et al 1.
**Shut Down**
8-19-13 Howard, C. H. Allison et al 1.
8-18-12 Garner, Bonderant et al 1.
9-18-17 Primm, Caigo Oil Co. 1.
34-17-15 Telford, Crestline Oil Co. 1.
5-16-16 Saxon, Crescent Pet. Co. 1.
21-18-12 Dykes, H. L. Hunt 1.
6-16-16 Childs, Mag. Pet. Co. 6.
5-18-13 Cordell, Superior Oil Corp. 1.
22-18-13 Peck, Tharpe et al 1.

**OUACHITA COUNTY**
**Rigs**
36-15-17 Shirey, H. E. Clark 3.
**Wells Drilling**
21-14-17 Reynolds, A. T. Grayson 1.
32-15-15 Goodwin, Gulf Ref. Co. 13.
-15-15 Umsted, Gulf Ref. Co. 24-A.
27-15-16 Hicks, W. R. Keever 2.
36-15-17 E. R. Smith, Mag. Pet. Co. 3.
36-15-17 H. Smith, Mag. Pet. Co. 3.
36-15-17 Shirey, Middlesex Oil Co. 4.
3-14-18 Chandler state, J. G. Reynolds 1.
28-15-15 Murphy, Simms Oil Co. 7.
33-15-15 Berry, Sunny Jim Oil Co. 12.
-15-16 Schoolhouse, A. M. Sutton 2.
31-15-15 Laney, Tex. & Pac. Coal & Oil Co. 9.
33-15-15 Umsted, Unity Pet. Co. 8-A.
15-15-19 Gosden, Mag. Pet. Co. 1.
22-15-19 Pelican, Wesson et al 1.
**Shut Down**
19-12-17 Ponder, H. M. Harrell 1.
Rigs, 1; wells drilling, 16; total, 17.

**COLUMBIA COUNTY**
**Rigs**
15-17-22 Gantt, Maier et al 1.
**Wells Drilling**
14-18-22 Barge, Ark. Fuel Oil Co. 1.
14-19-23 Whitehead, Columbia Oil Syndicate 1.
29-19-22 Franks, Mitchell et al 1.
6-18-20 Davis, Scott Phillips 2.
**Shut Down**
3-16-21 Runyon, Mitchell et al 1.
35-19-19 Duffer, Smith & Compton 1.
4-20-21 Bodcaw, Wingfield & Mitchell 1.
Rigs, 1; wells drilling, 7; total, 8.

**NEVADA COUNTY**
**Rigs**
6-14-21 Haynie, Martin et al 1.
**Wells Drilling**
9-14-21 Atkins, Advance Oil Co. 1.
9-14-21 McKinney, Advance Oil Co. 1.
9-14-21 Atkins, Dixie Oil Co. 1.
10-14-21 —Womack, Dixie Oil Co. 3.
22-12-21 Rhodes, Fruen et al 1.
9-15-22 Bodcaw, Humble Oil & Ref. Co. 4.
**Shut Down**
12-13-22 Cross, Fruen et al 1.
11-14-21 Wallace, Holmes et al 1.
Rigs, 1; wells drilling, 8; total, 9.

**MISCELLANEOUS**
**Wells Drilling**
33-15-11 Arkansas Timber Co., Mag. Pet. Co. 1.
28-15-26 Dale, Lenz et al 2.
**Rigs**
5- 4-11 Meek, Jones & Watkins 1.
15-16-23 Thomas, T. R. Brown 1.
**Shut Down**
20-15- 7 Bledsoe, Rhodes & Kirker 1.
25-16-12 Ark. Timber Co. 1.
12-12-12 Southern Lumber Co. 1.
31-10-10 Hall, Kingland Oil Co. 1.
35-13- 5 Olga, McClintock & Goodka 1.
23-10-25 Garland, Burton et al 1.
3-20-24 Red River, Kensaw Pet. Co. 2.
33-10- 6 Carter, Pine Prairie Oil & Gas Co. 1.
4-13-31 Waldrop, Greason et al 1.
3-13-31 Allen, Grote et al 1.
10-11-31 Hawkins, Mellick Oil Co. 1.
26-14-27 Priest, W. D. Nash et al 1.

# ROCKY MOUNTAIN AREA

## WYOMING

**Summary of Field Operations**

| Dist.— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl |
|---|---|---|---|---|---|---|---|
| Big Muddy | 0 | 0 | 0 | 0 | 8 | 8 | |
| Salt Creek | 11 | 9,866 | 0 | 0 | 14 | 88 | 102 |
| Lance Creek | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Big Horn Basin | 1 | 0 | 1 | 0 | 3 | 56 | 59 |
| Lost Soldier & Carbon Co. | 4 | 1,500 | 1 | 2 | 1 | 21 | 22 |
| Rock River | 0 | 0 | 0 | 0 | 0 | 10 | 10 |
| Fremont Co. | 0 | 0 | 0 | 0 | 1 | 21 | 22 |
| Osage | 0 | 0 | 0 | 0 | 2 | 3 | 5 |
| Natrona Co. | 0 | 0 | 0 | 0 | 0 | 7 | 7 |
| Lincoln and Uintah Cos. | 1 | 50 | 0 | 0 | 5 | 43 | 48 |
| Baxter Basin | 0 | 0 | 0 | 0 | 0 | 7 | 7 |
| Miscl. | 0 | 0 | 0 | 0 | 1 | 24 | 25 |
| Total Feb. | 17 | 11,416 | 2 | 2 | 27 | 289 | 316 |
| Total Jan. | 26 | 4,382 | 3 | 1 | 25 | 298 | 323 |
| Difference | 9 | 7,034 | 1 | 1 | 2 | 9 | 7 |

## MONTANA

**Summary of Field Operations**

| Dist.— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl |
|---|---|---|---|---|---|---|---|
| Kevin Sunburst | 11 | 192 | 3 | 1 | 9 | 58 | 67 |
| Cat Creek and Miscl. | 3 | 0 | 3 | 0 | 4 | 73 | 77 |
| Total Feb. | 14 | 192 | 6 | 1 | 13 | 131 | 144 |
| Total Jan. | 31 | 2,126 | 10 | 2 | 15 | 135 | 150 |
| Difference | 17 | 1,934 | 4 | 1 | 2 | 4 | 6 |

## COLORADO

**Summary of Field Operations**

| Dist.— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl |
|---|---|---|---|---|---|---|---|
| Total Feb. | 13 | 1,440 | 3 | 1 | 11 | 102 | 113 |
| Total Jan. | 4 | 2,375 | 1 | | 12 | 111 | 123 |
| Difference | 9 | 935 | 2 | 1 | 1 | 9 | 19 |

## UTAH

| Dist.— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl |
|---|---|---|---|---|---|---|---|
| Total Feb. | 8 | 0 | 1 | | 4 | 38 | 42 |
| Total Jan. | 0 | 0 | 0 | 0 | 2 | 40 | 42 |
| Difference | 1 | 0 | 0 | 1 | 2 | 2 | 0 |

## NEW MEXICO

| Dist.— | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl |
|---|---|---|---|---|---|---|---|
| Total Feb. | 1 | 335 | 0 | 1 | 15 | 136 | 151 |
| Total Jan. | 12 | 1,212 | 4 | 0 | 5 | 139 | 144 |
| Difference | 4 | 877 | 3 | 0 | 10 | 3 | 7 |

## WYOMING

**BIG MUDDY**

**Wells Drilling**

8-33-76 Humphreys, Continental Oil Co. 44.
2-33-76 Fendix, Edelman Oil Co. 1.
9-33-76 Humphrey, Continental Oil Co. 39.
8-33-76 Humphrey, Continental Oil Co. 42.
8-33-76 Humphrey, Continental Oil Co. 43.
-33-76 Crary, Texas Prod. Co. 33.
3-33-76 Barber, Wyomont Oil Co. 4.
6-33-76 Walker, Wendel et al.
Rigs, 0; wells drilling, 8; total, 8.

**SALT CREEK**

**Rigs**

35-40-79 NE Midwest Oil Co. 13-L.
11-39-78 SE Argo Oil Co. M-2.
9-39-78 SE Mt. and Gulf 8-A.
34-39-78 NW Mammoth Oil Co. 302.
34-39-78 NW Mammoth Oil Co. 305.
28-39-78 NW Mammoth Oil Co. 405.
28-39-78 NE Mammoth Oil Co. 406.
13-38-78 SW Wyo. Teapot Oil Synd.
10-39-78 NE Nicholayson et al.
19-40-78 NE Norris Oil Co. 18-A.
10-38-78 NW Mammoth Oil Co. 302.
31-39-78 SE Teapot Dev. Co.
1-39-79 SE Continental Oil Co. 11-A.
9-39-78 NW Carter Oil Co. 12-D.

**Wells Drilling**

East of Teapot, Daniels & De Long.
29-40-79 NE Wyoming Oil Fields 13-A.
-40-79 NE Wyoming Asso. 19-L.
10-39-79 NE Prairie Oil & Gas Co. 4-A.
23-40-79 NW, Wyoming Oil Fields 16.
20-40-79 NE Wyoming Oil Fields 24-A.
23-40-79 SE Wyoming Oil Fields 36.
-40-79 NE Wyoming Oil Fields 1.
-40-79 SE Wyoming Asso. 21.
-40-79 SE Wyoming Asso. 34.
14-40-79 NE Midwest Oil Co. 16-A.
25-40-79 NE Midwest & Wyo. Asso. 18-L.
12-39-79 E½ Ohio Oil Co. 25.
6-39-78 NE Mt. and Gulf 29-A.
26-40-79 NE Wyoming Asso. 20.
-40-79 NW Wyoming Asso. 24.
-40-78 SW Wyoming Asso. 32-A.
3-39-79 NE Salt Creek Cons. 1-L.
27-40-79 SE Midwest Oil Co. 36-L.
34-40-79 NE Midwest Oil Co. 1-L.
-40-79 SE Midwest Oil Co. 24-L.
17-40-79 SE Midwest Oil Co. 13-L.
2-39-79 NW Midwest Oil Co. 23-L.
24-40-79 SW Midwest Oil Co. 34-A.
2-39-79 SE Sinclair Wyoming 16-A.
19-40-78 NW E. T. Williams 2-AS.
26-40-79 NW Wyoming Asso. 22-L.
26-40-79 SW Wyoming Asso. 22-L.
26-40-79 NW Wyoming Asso. 18-L.
26-40-79 NW Wyoming Asso. 13-L.
26-40-79 SE Wyoming Asso. 21-L.
35-40-79 NE Midwest Oil Co. 18.
34-40-79 SE Wyoming Asso. 1-L.
35-40-79 NE Midwest Oil Co. 18.
34-40-79 SE Wyoming Asso. 1-L.
34-40-79 NE Wyoming Asso. 36-L.
35-40-79 NW Wyoming Asso. 15-L.
24-40-79 SW Wyoming Asso. 16.
26-40-79 NW Wyoming Asso. 24.
26-40-79 NE Wyoming Asso. 28.
26-40-79 NW Wyoming Asso. 33.
34-40-79 NW Wyoming Asso. 24.
26-40-79 SW Midwest Oil Co. 3, 4.
5-39-78 NW Western States O. & L. 29-A.
28-40-79 SW Jupiter Oil Co. 34-S.
**Shut Down**
32-40-76 SW Continental Oil Co. 20-SH.
7-39-78 SE Continental Oil Co. 8-A.
35-40-79 NW Wyoming Asso. 24-L.
36-40-79 NE Wyoming Asso. 16-L.
35-40-79 SW Midwest Oil Co. 6-L.
25-40-79 NE Wyoming Oil Fields 19-L.
26-40-79 NE Wyoming Asso. 4-L.
35-40-79 SW Midwest Oil Co. 31-L.
35-40-79 NE Midwest Oil Co. 16-L.
26-40-79 SW Midwest Oil Co. 18-L.
25-40-79 NW Midwest Oil Co. 31-L.
26-40-79 NE Midwest Oil Co. 16-L.
26-40-79 SE Midwest Oil Co. 1-L.
35-40-79 NE Midwest Oil Co. 31-L.
23-40-79 SW Midwest Oil Co. 1-L.
36-40-79 NE Wyoming Oil Fields 36-L.
26-40-79 NE Wyoming Oil Fields 22-L.
23-40-79 SE Wyoming Oil Fields 6-L.
34-40-79 SE Salt Creek Cons. 36-L.
26-40-79 NE Wyoming Asso. 31-L.
23-40-79 SE Midwest Oil Co. 16-L.
23-40-79 NW Wyoming Oil Fields 36-L.
2-38-78 SE Staley, Foley Synd. 34-A.
35-39-78 SW Staley-Foley Synd. 16-A.
26-40-79 SE Wyoming Asso. 22-L.
10-40-79 SE Empire State Oil Co. 25-A.
28-39-78 NE Mammoth Oil Co. 101.
29-39-78 NE Mammoth Oil Co. 108.
28-39-78 NE Mammoth Oil Co. 202.
28-39-78 NW Mammoth Oil Co. 205.
4-38-78 NE Mammoth Oil Co. 101.
23-39-79 NE Evans Oil Corp.
32-40-78 SW Jupiter Oil Co. 27-A.
2-39-79 NW Midwest Oil Co. 15-L.
23-40-79 NW Midwest Oil Co. 15-L.
23-40-79 SE Wyoming Oil Fields 4-L.
33-40-79 SW Midwest Oil Co. 34-L.
34-40-79 SW Continental Oil Co. 35-A.
23-40-79 SW Wyoming Asso. 19-L.
34-40-79 NW Wyoming Asso. 34-L.
2-39-78 NW Midwest Oil Co. 3-L.
23-40-79 SE Wyoming Asso. 33-L.
Rigs, 14; wells drilling 88; total, 102.

**LANCE CREEK**

**Wells Drilling**

7-35-65 Thompson, Wyo. & Mont. Development Co. 1.
Rigs, 0; wells drilling 1; total 1.

**BIG HORN BASIN**

**Rigs**

5-47-90 Hetzler, Ohio Oil Co. 1.
13-46-89 Tensleep, Prod. & Refs. 1.
7-51-100 Fred Ostland et al 1.
**Wells Drilling**
22-47-101 Taylor, Union Oil Co. 1.
9-51-101 Fred Ostland et al.
7-51-101 Fred Ostland et al.
25-58-98 NW V. M. Kirk.
3-43-93 Corley, Ohio Oil Co. 1.
24-51-93 SE J. E. Scalon et al. 1.
31-58-99 Top No. 6, Midwest Refg. Co. 3.
-43-91 State, Utah Oil Refg. Co. 3.
8-51-100 Sonners, Ohio Oil Co. 3, 4.
13-55-97 Lot 43, Standard of Calif.
31-48-90 Tensleep, Ohio Oil Co. 3.
24-56-98 Garland, Prod. & Refs. 2.
11-40-90 Garry Oil & Dev. Co.
15-49-91 Shaffer & Tilley.
18-46-92 Washakie, Ohio Oil Co. 4.
20-52-101 Washington Oil & Gas.
14-47-102 Big Horn Dev. Co.
-53-101 Taylor Brothers.
7-46-92 Washakie, Ohio Oil Co. 2.
5-51-97 SW C. M. Carroll et al.
9-54-95 SW Wisconsin Hines Co.
15-44-92 SW F. L. Pierce.
19-46-98 State, Ohio Oil Co. 41.
-56-98 Elk Butte O. & G.
24-43-91 SE Union Oil Co. 1-A.
28-43-91 NW Union Oil Co. 1-A.
-43-94 SW Wyoming Montana Oil Co.
17-46-98 Washakie, Ohio Oil Co.
8-43-91 Murphy Dome, Prod. & Refs. 1.
23-56-98 Cross Gas, Ohio Oil Co. 2.
**Shut Down**
25-58-98 Govt. Land, Summit Oil Co. 1.
-44-96 F. A. McPherson.
3-56-98 Brown, Allen Oil Co. 2.
7-51-101 Fred Ostland et al.
5-58-90 R. R. Land, Henderson Petro. Co.
5-42-90 Avery, Utah Oil Refg. 1.
2-43-91 Ft. Collins, Utah Oil Refg. Co.
35-43-91 Weller, Utah Oil Refg. 2.
36-43-91 State, Utah Oil Refg. 3.
28-44-93 West Zimmerman Butte O. & G.
31-43-93 Utah Oil Refg. Co. 3.
29-56-97 NE Utah Southern Oil Co.
29-56-97 SW Utah Southern Oil Co.
2-47-100 Midwest Refg. Co.
4-91-100 Florence Oil Co.
3-55-97 Griffin, Allen Oil Co.
8-46-98 Big Horn Dev. Co.
19-51-92 Bruce Holding Co.
34-43-92 C. D. Markham et al.
10-54-94 SE Westland Oil Co.
35-55-95 Westland Oil Co.
11-49-102 Omar Oil & Gas Co.
18-56-98 Tumador Oil Co.
19-51-92 Torchlight Oil Corp.
5-54-95 SW Royal Oil & Refg. Co.
Rigs, 3; wells drilling 56; total, 59.

**LOST SOLDIER**

**Rigs**

12-19-87 Marland Oil Co.
**Wells Drilling**
10-26-90 Prairie Oil & Gas 50-A.
2-26-90 Utah Oil Refg. Co. 7-A.
6-90 Utah Oil Refg. Co. 6-A.
8-26-89 H. P. Nutting.
34-26-88 Prairie Oil & Gas 3-C.
29-26-87 Producers & Refs. 3.
11-26-90 Wyo.-Ill., Prod. & Refs. 9.
**Shut Down**
25-26-87 Ferris, Prod. & Refs. 19.
34-22-90 A. A. Akers. 1.
14-21-84 St. Marys, Prod. & Refs.
25-22-86 Sugar Creek, Prod. & Refs.
28-21-86 Greenville, Prod. & Refs. 1.
-26-90 Sand Hills Oil Co. 5.
8-26-89 E. R. Goode.
14-20-88 Lake Valley Oil Co.
25-26-88 Hughes Royalty Co.
4-26-90 Sand Hills Oil Co. 4.
25-25-89 E. R. Goode.
21-26-86 Portland Wyoming 3.
29-26-86 Portland Wyoming 1, 2.
Rigs, 1; wells drilling 21; total 22.

**ROCK RIVER**

**Wells Drilling**

2-19-78 H. & C., Ohio Oil Co. 12.
25-26-70 Prod. & Refs. 1.
3-19-78 H. & C., Ohio Oil Co. 5.
28-18-78 Dutton Creek, Midwest Refg. 34.
34-20-78 SE M. L. Lundy.
12-17-77 Quealy, Texas Prod. Co.
**Shut Down**
12-16-74 SW G. A. Briggs.
34-23-79 Central Pipe Line Co.
10-18-77 Carbon County Oil Co.
12-27-77 McLaughlin et al.
Rigs, 0; wells drilling 10; total, 10.

**FREMONT COUNTY**

**Rigs**

34-34-92 Muskrat, Prod. & Refs. 1.
**Wells Drilling**
27- 3- 1 Pilot Butte O. & G.
10-32-95 Prod. & Refs. 5.
27- 6- 2 Maverick Drilling Co.
9-31-98 Martin F. Fold.
14-32-80 Meyers Petro. Co.
31- 1- 1 Wyoming Syndicate.
14-32-95 Riverton Petro. & Prod. & Refs.
15- 5- 1 Union Oil Co.
30- 1- 2 William M. Campbell.
24- 1- 1 Garner, Union Oil Co.
**Shut Down**
29-32-98 Frank England, trustee.
31- 1- 1 Bridger Oil Co.
27- 6- 3 Kinney Coastal Oil Co.
19-27-95 Brimmer, Prairie Oil & Gas.
17-33-94 Winter-Baker Interests.
6- 6- 2 Union Oil Co.
16-26-95 Sage Creek Petro. Co.
3- 1- 2 NE Teton Petro. Co.
4-31-98 Derby Dome Wyoming.
4-31-98 Burnside Oil Co.
24-32-95 Seal Oil Asso.
Rigs, 1; wells drilling, 21; total, 22.

**OSAGE**

**Rigs**

30-46-63 NE Glenn Oil Co.
31-47-63 L. B. Hanson.
**Shut Down**
42-46-63 Wyoming Oil & Gas Co.
10-46-61 Lenhard & Briggs.
8-46-63 Griffith Oil Co.
Rigs, 2; wells drilling, 3; total, 5.

**NATRONA COUNTY**

**Wells Drilling**

4-29-81 Iowa Wyoming 13.
1-28-80 Foreman et al.
13-33-80 Wheeler, Millard et al.
**Shut Down**
26-35-84 Harris & White.
3-36-85 Notches, Midwest Refg. Co. 2.

15-32-82 Bessimer Bend Dev. Co.
5-39-89 NW Vernon Oil Co.
Rigs, 0; wells drilling 7; total 7.

**LINCOLN AND UINTAH COUNTIES**

**Rigs**

33-27-113 Shidler Syndicate.
3-26-112 California Petro. Co.
31-28-113 Tip Top Oil Co.
12-29-113 Cretaceous Oil Co.
4-26-113 Wyoming Reserve Oil Co.

**Wells Drilling**

7-28-111 Elk Horn Oil Co.
12-28-114 Lackey et al.
29-28-113 Wyoming Production Co.
1-28-114 Lackey, Leo Stein.
6-28-112 Tracy Y. Cannon.
3-26-113 California Petro. Co. 5.
24-27-113 California Petro. Co. 8, 10.
34-27-112 California Petro. Co. 2.
9-29-113 Guy B. Hockett et al.
23-21-117 NE Lincoln Dev. Co.
32-19-116 Cumberland Dome Oil Co. 2.
16-27-113 Good & Nutting.
14-21-117 NE Pioneer Oil Co.
30-15-118 NE Stanburg Petro. Co.
22-27-113 NW W. F. Atkins et al.
21-27-113 SE Midwest Refg. Co. 1.
3-26-113 Texas Prod. Co.
36-27-113 SW Squires Oil Co. 1.
3-26-113 SW Superior Oil Co.
26-27-113 NW Wooten Interests.
3-26-113 NW Mid States Oil Co.
Near Afton, Great Western Oil Co.
23-36-113 Fawcett-McPherrin Interests 1.
15-26-113 Fawcett-McPherrin Interests 2.
15-21-117 Pacific Properties Co.
6-15-118 Vulcan Oil Co.
9-26-113 Transcontinental Oil Co.
20-26-113 Murphy Davis Oil Co.
35-27-113 Associated Producers.
31-15-118 Olsen & Zimmerman.
10-14-118 Wilcox-Henley.
12-15-118 Spring Valley Oil Co.

**Shut Down**

20-19-116 C. C. Conger et al.
32-19-110 Johnson, Granger Oil Co.
22-28-112 NE Margaret Kay.
21-15-118 NE Mrs. D. Connel 3.
22-26-113 Big Piney Oil Co.
4-26-113 Uintah Oil Co.
3-26-113 Wyoming Reserve Oil Co.
3-26-113 Reece Oil Co.
26-27-113 Myrta Bonnett.
13-27-113 H. H. Goddard.
Rigs, 5; wells drilling 43; total, 48.

**BAXTER BASIN**

**Shut Down**

26-17-104 Associated Oil Co. 3.
23-17-104 Associated Oil Co.
24-17-104 SE Montical Oil Co.
8-16-104 SE Montical Oil Co.
20-18-104 Midwest Refg. Co. 6-AX.
27-27-104 Montical Oil Co.
11-19-104 Prod. & Refs.-Marland.
Rigs, 0; wells drilling, 7; total 7.

**MISCELLANEOUS**

**Rigs**

Baggs Dome, M. M. Armstrong.

**Wells Drilling**

2-39-61 Harry E. Briggs 3.
8-32-72 NE O'Bannon & Barker 3.
13-25-66 Jacobs Syndicate.
17-27-60 Agate Basin, Hollingsworth Bros.
19-27-68 McKinley Oil & Gas.
21-21-69 Ackard et al.
28-47-67 Gose Syndicate.
17-46-82 R. C. Tarrant et al. 2.
8-44-60 Briggs & Sartain.
12-29-27 Platte Valley Drilling Co.
17-47-82 Rider, Carter Oil Co.
Guernsey District, Illinois Synd.
5-51-67 C. M. Carroll et al.
16-33-68 SW Schuyler et al.
1-32-68 A. E. Mauft et al.
32-62-67 SW Western Consolidated Oil Co.
24-62-62 Foreman et al.
5-31-70 Criterion Oil Co.

**Shut Down**

7-47-82 Fairway Oil Co.
24-49-64 Osage Trust Co.
18-29-68 Glendo Oil Co.
1-44-61 Osage Trust Co.
31-27-67 NW Atlas Oil Co.
35-48-65 Lilley, Pump Creek Oil & Gas.
Rigs, 1; wells drilling, 24; total 25.

**MONTANA**

**CAT CREEK**

**Shut Down**

21-15-30 Sevals & Fisher.
31-15-30 Masser, Kessling Oil Co.
11-15-29 Cooke-Coolidge.
12-15-28 Van Tassel, California Co.
1-15-29 Custer Oil Co.
9-15-29 Frantz Oil Corp.
36-15-28 Hardrock Oil Co.
7-15-29 NW Hogan et al.
11-15-29 Fifty Six Petro. Co.
15-15-30 Swartz et al.
18-16-28 Peerless Oil Co.
Rigs, 0; wells drilling, 11; total 11.

**KEVIN SUNBURST**

**Rigs**

10-35- 2 Bruins, Ohio Oil Co. 5.
23-35- 2 Reeg, Ohio Oil Co. 6.
8-34- 2 SW Hardrock Oil Co.
20-34- 1 Zacher, Minot Oil Co.
22-35- 2 Halfer L. W. Hill 6.
30-35- 1 Maughans, Ohio Oil Co. 14.
29-35- 1 Benton, Arronow Oil Co.
30-35- 2 McBride, Canadian Oil Co.
17-31- 1 Potlatch Oil Co.

**Wells Drilling**

28-35- 1 Dipple, Ferdig Oil Co. 2.
31-35- 1 Allen, "31" Petro. Co. 6.
22-35- 2 Lorensen, L. W. Hill 11.
33-35- 1 Haskins, Adams Co. 4.
32-35- 1 Putnam, Ohio Oil Co. 5.
33-35- 1 Haskins, Ski-U-Mah Oil Co. 2.
33-35- 1 Haskins, Caine et al. 1.
17-29- 2 Overly, Adams Co. 1.
4-34- 2 Norum, Sunburst Oil & Refg. Co.
30-35- 1 Emmons, Dakota-Montana 17.
13-32- 2 Peterson, Conrad-Edwards.
27-35- 2 Lashbaugh, California Petro. 12, 13.
20-34- 1 Robert Smith Interests.
1-32- 2 Sunburst Oil & Gas.
30-34- 1 Clarence Proulse.
25-35- 2 Stannard, Wyomont O. & R. 8.
25-32- 2 Knobes, Howe-McCormick.
1-34- 2 Steele, Oldsbuey Syndicate.
7-35- 1 Russell, Reservation Oil Co.
30-35- 1 Stannard, Rose Oil Co. 3.
9-32- 2 NE Frazier Oil Co.
8-34- 2 Pittsburg-Montana Oil Co.
24-32- 1 Shelby Syndicate.
32-36- 2 Roundsley, Sunburst Oil & Gas.
20-35- 2 Halter, Sunburst Prod. Co.
18-34- 1 Skinner, Creel et al.
32-35- 1 Putnam, Keystone Oil Co.
7-34- 1 Harte, Russel et al.
30-35- 1 Tri State Oil Co.
35-35- 2 Sunburst Oil & Gas Co.
22-35- 2 SW Lorensen et al.
29-35- 1 Maughans, Sweeney Oil Co. 4.
17-35- 1 Frazier, Rice Oil Co.
30-35- 1 Stannerd, Tri-State Oil Co. 5.
1-34- 2 Steele, Bruce Radigan 2.
8-35- 2 Hurley, McDonald et al.
1-34- 2 Faunce, McIntire Beckett.

**Shut Down**

31-35- 1 Byrne, Fulton Oil Co. 21.
32-35- 1 Caine, "56" Petro. Co. 22.
25-34- 1 Seigel, Carter Oil Co.
4-33- 2 Harrison-Stinchfield, Carter Oil Co.
22-34- 1 Dahl, California Petro. Co.
14-34- 2 Jenkins, Creel Sunburst 2.
15-32- 1 Manson, Sunburst Oil & Refg. Co.
11-27- 2 Lorum, S. Hart Green.
21-35- 1 Danielson, Crescent Oil Co. 3.
17-31- 1 Dunkirk Drilling Co.
25-34- 2 Moffet, Mouse River Oil Co.
23-36- 3 Carrol, Red Top Oil Co.
24-34- 2 Morton, Medford Oil Co.
20-36- 2 Loy Oil Co.
28-36- 2 Kalmont Oil Co.
11-35- 2 Lind, Carter Oil Co. 4.
17-34- 2 Larsen, Pondera Valley Oil Co.
28-35- 1 Shelby, Federal Miller.
12-34- 1 Peterson, Lucky Forty Oil Co.
16-34- 2 Rainbow Oil Co.
Rigs, 9; wells drilling, 58; total, 67.

**MISCELLANEOUS**

**Rigs**

24-15-14 Fullerton Oil Co.
12-10-32 Hibbard Oil Co.
4- 28-30 Mid-Continent Oil Co.
34-23- 2 Rainbow Syndicate.

**Wells Drilling**

35-12-22 McElwain Devl. Co. 2.
25-14-28 Winnet Pacific Oil Co. 1.
17- 7- 1 Madison Oil & Gas 1.
32- 4-18 SW Empire Oil & Gas.
13- 3-22 Murray & Burke.
23-36- 3 Red Top Oil & Gas Co.
29-31- 2 Johnson, Carter Oil Co.
24- 1-21 Record Petro. Co. 3.
17-27- 6 Julian Petro. Co.
35-30- 3 Hiland-Van Dale Oil Co.
2 29- 1 Big Eleven Oil Co.
12- 5-30 Bull Dog Oil Co.
29-28-37 Glasgow Exploration Co.
19- 3-23 Dickie, Norbeck Co.
12-22- 3 Allen Oil Co.
31-31-20 Round Butte Oil Co.
Medicine Hat, Roth Syndicate.
34-23- 2 Allen Oil Co.
1-31-31 Big Dome Oil Co.
25-17-24 California Co.
21-37- 5 Utah Western Petro. Co.
13- 8- 2 Coal Ridge, Montana Oil & Gas Co.
23- 3-24 Link, Euclid Oil Co.

**Shut Down**

23- 3-21 Little Basin, Prairie Oil & Gas 1.
21-35- 7 Newell, Kalispell Pet. Co. 1.
9-18-26 Fould, Montana Major Oil Co.
17-35-23 Rose Oil Co.
3-22- 3 NW Elk Horn Oil Co. 2.
34-22- 1 Great Northern Mutual.
33-16-28 NW Oakmont Petro. Co.
7- 8-57 Wolf Creek, Calif. Montana Oil Co.
28- 8-45 Montana Belle Oil Co.
21-7 -21 SW Atlantic Petro. Co.
34-3- 24 Broadview Syndicate.
17-3- 18 NE Gibson Land Co.
27-36-12 SW Mountain Chief Oil Co.
14-31- 1 Dunkirk Oil Co.
9-21-14 Glenholm Oil Co. 2.
18-22- 3 SW Elk Horn Oil Co.
32-35-30 Butler Oil & Gas.
24-30- 1 Continental Prod. Co.
17- 3-19 Mid Northern Oil Co.
4-28-20 California Oil Co.
20-24- 1 McDonald et al.
3-27- 8 Robinson et al.
McDonald Creek, Wilson Fisher 3.
32-36- 2 Weill Syndicate.
25-12- 1 Ainsworth, Neudigate Interests.
17-2- 18 NE Gibson Land Co.
18-30- 3 Great Northern Producers.
24-10-39 Jones et al.
2-26- 2 Jones, M. M. Edwards.
7-27- 7 Circle Oil Co.
4 2-25 SW C. R. McMinniman et al.
26-10-29 Stellar Oil & Gas 6.
9-10-39 Stellar Oil & Gas 5.
7-21- 1 Tri State Oil Co.
12-11-18 Kalispell Syndicate.
24-14-25 Henry Seibert.
8- 4-22 Hoosier Oil Co.
20- 7-60 Gas Production Co.
13- 3-22 NE Murray & Burke.
Rigs, 4; wells drilling, 62; total 66.

**COLORADO**

**Rigs**

17-33- 7 Vanruff & Miller.
7- 9-68 Gault-Piatt, Union Oil 4.
2- 9-79 Pollock, Continental Oil 1.
1- 9-79 Peterson, Continental Oil 1.
1- 8-68 Morrell, Petroleum Prod. Co.
17- 8-68 Fort Collins Chief Oil Co.
12-38-68 Green Mt. Petro. Co.
29- 9-69 NW Farrell et al.
36-10-68 State, Seneca Oil Co.
10-10-61 SE Dougherty et al.
31-10-68 Buckeye, Union Oil 5.

**Wells Drilling**

16-10-69 Buckeye, A. A. Rollestone.
28- 1-70 Odlum, Offset Oil Synd.
34-17-70 Mutual Oil & Dev. Co.
17- 4-69 Berthoud, Five Square Oil & Gas.
5- 1-70 Martin, Essok Oil Co.
34-18-70 Continental Oil Co. 581.
19-19-69 Florence Oil Co. 3.
4-47-16 Mullen, General Petro. Co.
29-26-57 Bell Ranch, Timpas Dome Synd.
12- 6-86 State, Texas Prod. Co. 1.
10- 4-91 Wick, Texas Prod. Co. 3, 5.
30-10-68 Union Oil Co. 1.
34- 4-92 Taylor, Marland Oil Co. 1.
11- 1-44 Yuma Valley Oil Co.
6-47-18 Wilcox, General Petro. Co. 2.
9-34-62 Great Dome Oil Co.
20-20-68 Baxter, C. E. Puckett et al 2.
27- 3-94 Freeman, Texas Prod. Co. 1.
13-23-50 Ligget, Caddo Oil Co.
24- 2-103 Tidewater Associated Oils.
35-18-70 Continental Oil 579.
11-30-69 Foley & Goldsworthy.
5- 6-86 McNeill, Texas Prod. Co. 1.
5- 6-86 Thompson, Texas Prod. Co. 1.
35-38-19 Wilcox, General Petro. Co.
7- 9-68 Dement, Union Oil Co.
30-10-68 Foster, Union Oil Co. 1.
35- 5-91 Knowlton, Texas Prod. Co. 9.
33- 5-81 Knowlton, Texas Prod. Co. 10.
15- 4-91 Pohlman, Texas Prod. Co. 1.
31- 2-102 Emerald, Texas Prod. Co. 2.
30- 2-102 Rangeley, Midwest Refg. Co. 2.
22- 4-92 Parkinson, Midwest Refg. Co. 4.
30- 2-70 Spurgeon, Boulder Petro. Co.
14- 1-48 Yuma Oil Dev. Co.
32-33-12 Hutchinson, E. J. Miley.
2- 8-68 State, Atlantic Petro. Co.
33- 1-70 Denies, Repollo Oil Co.
15-21-65 Union Oil Co. of Colo.
10-24-69 Panuco Petro. Co.
28- 3-65 Miller Oil Co.
21- 6-91 Petterson, Platte Valley Oil Co.
1- 2-68 Orrison, Municipal Oil Co.
33- 8-68 NE Hobart Petro. Co.
21-20-69 Majada Oil & Gas Co.
13-33-12 NW W. H. Hall et al.
34-32-65 Nojack Oil Co.
6- 7-68 Brown, Douglass Oil Co.
5- 6-68 Majestic Oil Co.
4-32-67 Tulsa Oil Leasing Co.
34- 8-68 Ruff, Victory Oil Co.
9-12-68 Panuco Exploration Co.
1- 9-69 NW Great Northern Oil Co.
11-19-65 Zenith Red Creek Oil Co.
33-36- 9 Latten, Durango Oil & Gas Co.
36- 8-55 State, Northeast Colorado Oil Co.
11-33-12 Snyder, Ohio Oil Co.
4- 7-86 Elkhead Dev. Co.
30-27-45 NW Lamar Oil Co.
16-21-65 Columbia Heights Oil Co.
9-17-69 John J. Red Creek Oil Co.
Fremont Co., Parkdale O. & G.
28-28-52 Southeast Colorado Oil Co.
30-10-68 Warren, Poudre River Oil Co.
1- 8-68 Warren, Consolidated Oil Fields Co.
16-20-69 E. R. Goode et al 2.
17- 9-68 Elder, Farrell Associates.
34- 9-69 Ruff, Equitable Oil Co.
14- 1-68 Smith, Retter Oil Co.
11- 4- 8 H. H. Temple et al.
6-32-62 State, Bent County Oil & Gas Co.

**Shut Down**

23-33-12 Pulliman, Erdman et al.
10-34-11 Dutton & Lightner.
36- 9-69 State, Union Oil Co. 1.
8- 6-68 Warren, Union Oil Co. of Colo.
20-33-61 Davey, Benj. Davey et al.
31-18-51 Mineral Exploration Co.
35-22-65 NE San Carlos Oil Co.
13- 8-69 Hoff, Centennial & Sunset.
23- 6-69 Wellington Oil Co.
3-32-12 Leidecker Petro. Co.
25-1- 69 Everhard, Boulder Oil Corp.
25-24- 1 SW Utah Southern Oil Co.
32-20-63 Baxter, Salida Oil Ref. Co. 2.
32- 2-69 NE White River Dev. Co.
28- 7-92 NE Boyles Oil Co.
17-34- 2 C. W. Kirkwood 1.
6- 8-102 Linquist, Midwest Refg. Co.
28-27-70 Gehrung, Sand Mills Oil Co.
32-31-61 Colorado Oil & Gas Co.
23- 6-69 Ruckvetter, Wellington Oil Corp.
19- 5-69 Alps, Gateway Oil Co.
23- 9-69 Waverly, Consolidated Oil Fields.
5- 8-103 Gypsy Oil Co.
32-10-68 SE Imperial Oil Co.
8- 8-102 Smith, Sun Oil Co.
25- 8-68 NE American Petro. Co.
24- 9-69 Hanna, Wellington Oil Co.
6- 7-68 NE Bonner Oil Co.
17-17-64 NW Peerless Oil Co.
4-45-16 Gilmore Oil Co.
Rigs, 11; wells drilling, 102; total, 113.

**UTAH**

**Rigs**

36-26-20 J. L. Shaffer, Midwest Exploration.
3-30-20 Rose, Desert Petro. Co. 1.
16-30-25 Lisbon, Union Oil of California.
20-25-21 Moab, Empire Petroleum Co.

**Wells Drilling**

1-30-20 Utah Petro. Co.
28-41-19 Canyon, Utah Southern Oil 1.
34-26-21 Moab, Utah Oil Dev. Co.
17-22-19 Armstrong Oil Co.
28-40-18 Noble, Utah Southern Oil Co.
36-41-19 Francis Oil-Utah Petro. Co.
5-27 91 Prommel, Midwest-Snowden McSweeney.
17-34-24 Boulder Knob Oil & Gas.
30-40-19 Elk Ridge, Midwest Exploration.
16-28-20 Hazelwood, Utah Southern & Equity Oil.
4-28-19 Western States Dev. Co.
12-30-20 Western States Dev. Co.
6-30-20 Empire Oil & Fuel Co.
34-25-21 Big Six, Embar Oil Co.
4-22-20 SE Crescent Eagle Oil Co.
8-26-22 Utah Oil Co.
31- 9- 8 Utah Petro. Co.
19- 9- 8 E. J. Raddatz.
27-41-19 Utah Southern Oil Co.
19-22-21 Utah Oil Refg. Co.
36-40-20 Utah Oil Refg. Co. 2.
16- 2- 5 Monroe Oil Co.
23- 3-24 Clay Basin, Producers & Refiners Corp. 2.
17-27-20 J. E. Shaffer, Midwest & Utah Southern.
23-14-92 Mt. States Petro. Co.
27-21-19 Western States Dev. Co.
4-19-25 Charles Orchard et al.

**Shut Down**

2-12-20 L. L. Travis.
21-22-22 Hope Syndicate.
6-14-12 San Juan Dev. Co.
23-42-17 Monumental Oil Co.
12-19-13 Ute Petro. & Utah Southern.
13- 4-16 Castle Dale Oil Co.
27-16- 4 Producers Oil Co.
Lakeside Dome, W. R. Holmes.
25-13-13 Utah Central Oil Co.
Diamond Fork, Gustaven Oil Co.
6-27-21 Shaffer, Midwest-Utah Southern.
Rigs, 4; wells drilling, 38; total, 42.

**NEW MEXICO**

**Rigs**

15-17-32 Beardsley, Maljamar Oil & Gas.
35-17-27 Russel, Empire Gas & Fuel Co. 2A.
34-17-27 Russel, Empire Gas & Fuel Co. 1B.
2-18-27 State, Empire Gas & Fuel Co. 3A.
11-20-30 Hale, Marland Oil Co.
12-29-19 Continental Oil Co. 23.
32-17-27 Navajo Oil Co. 1.
10-29-11 Kellberger, R. M. Smith et al 1.
30-8- 31 Rhoades, Midwest Exloration Co.
34-16-31 Caprock, The Texas Company.
33-18-28 Pueblo Oil Co.
9-20-11 F. G. McMahon et al.
32-17-27 Navajo Oil Co.
10- 2-28 Oliver Weill.
5-18-28 State, Lowe et al.

**Wells Drilling**

30- 8-31 Frio, Midwest Exloration Co.
3-27-17 Table Mesa, Continental Oil 11.
25- 7- 2 Stone et al.
30- 6- 3 Tome Grant, Gilmore & Sheldon.
4- 2-20 Navajo Oil Co.
12- 7- 7 DeHart, Sinnock, Reynolds et al.
3- 3-15 Duran, Diamond Oil Co.
8-29- 9 Pine Butte, Union Oil & Mining 2.
17-29-13 Palmer, San Juan Petro. Co.
22-30- 9 Haren, Coon-Hennis Syndicate.
2- 4-19 Woods, Woods et al.
21-17-30 Kisler, Mid Continent Petrol Co.
14-24-30 Pase Monte, Sun State Petro. Co.
5-30-28 Honey, Farrell Associates.
25- 8-32 Foley Griggs, Gibson Oil Corp.
17-16-27 State, Lakawana Oil & Refg. Co.
11-18-27 Govt. Lane Etz No. 1.
11-16-32 State, Caprock Oil Co. 1.
25-19-35 State, Exploration Co.
22-11-26 Shugart, Delmar Oil Co.
27- 4-22 NW Trigg Syndicate.
19-18-28 Flynn, Welch & Yates.
24-13-30 Arena Oil Co.
29-17-18 Dunkin, Texas Prod. Co.
8-11-23 Gibson Oil Corp.
4- 2-20 Henkle et al.
20- 7- 1 Arnold et al.
30- 6- 3 Gilmore & Sheldon.
28-18-28 Allen Toomey, Ohio Oil Co. 8.
12-23-29 Workman, Ohio Oil 1.
24- 7-29 Wells, Ohio Oil 1.
18-17-32 Mitchell, Ohio Oil 1.
21-17-30 McIntire, Wooley Jones.
10-17-31 Keil, Prairie O. & G.
1-17- 9 Hancock, Midwest Ref. Co.
2-29-19 Rattlesnake, Continental Oil 17.
4-17-34 Inglefield & Bridges.
7- 6- 8 Weber, Jones & Newberry.
28- 6-10 Randall et al 2.
23- 3-13 SE, Pinos Wells Oil Corp.
23- 4- 1 Seippe Oil Co.
9- 1-31 Pounder & Pomeroy.
20-31- 1 Paul S. Ache.
28-17-28 Navajo Oil Co. 2.
5-17-32 Mitchell, Maljamar Oil Co.
17-18-28 State, Williams Petrol Co.
34-17-33 Govt. land, Texas Prod. and D. B
21-29-11 Jackson, "26" Oil Co.
5-17-28 Govt. Land, New Mexico Oil Co.
22-18-34 State, McDonald et al.
26- 6- 2 Acme Oil Co.
24-31-11 Southwest Dev. Co.
11- 3-32 Curley, Contillion Oil Co.
8- 6- 1 Navajo Oil Co.
10- 3-17 NW, Navajo Oil Co.
10-29-24 Eureka Oil Co.
10-28-26 Moore, Bevins & James.
29-17-18 Wilson, Texas Prod. Co.
30-20-10 Benedum & Trees.
5-17-28 SE, Miley Oil Co.
18- 7-21 Ventura Oil Co.
16-18-28 Compton-Hausenfus-Lewellyn.
17-18-28 SW, Cummings No. 2.
4-18-28 Pueblo Oil Co.
4-21-27 M. M. Miller.
15-29-11 Bloomfield O. & G.
15-23-24 California Co.
16-29-11 SE, C. S. Ringle.
34-29-11 C. S. Ringle.
4-21-30 SW, Van Cleve & Kronen 2, 3.
24-10-27 NW, R. C. Christman.
8- 2-14 Simmons et al.
17-28-28 NW, W. G. Hurst.
9-10-28 Danciger Brothers.
15-29-11 Butler Stonacher Synd.
25-17-26 Patterson & Stumphl.
15-15-29 Southern Exploration Co.
7-19- 1 La Vantana.
22-18-27 Southeast Colorado Drlg. Co.
18-18-28 Sidler Drlg. Co.
24-30-13 Portage O. & G.
19-18-29 Bujac-Wade-Murphy.
34-11-11 Garland, Congress Oil Co.
16- 1-27 McAdoo, Navajo.
1-18-31 SE, Sullivan et al.
18-12-34 State, Holmes & Huey.
36- 1-21 Ingram, Navajo Oil Co.
7-29- 7 Federal Drlg. Co.
32- 6- 1 New Mexico Dev. Co.
13- 6- 2 Hub Oil Co.

**Shut Down**

11- 6-27 State, Sparrow & Drake.
12-19-26 Billings, Hamilton Pet. Co.
9-30-11 Chrisman, New Mexhoma Oil.
16-21-33 Govt. Land, Covert et al.
36-11-27 SW, Burlo Roswell.
32- 7-10 Minerman et al.
31-19-23 Pruitt, Ohio Oil Co.
6-18-72 Jewett, Ohio Oil Co.
22-16-30 Sellery, Ohio Oil Co. 1.
23-16-29 Young, Ohio Oil Co. 1.
21-17-28 Johnson, Ohio Oil Co. 1.
27-19-38 Govt. Land, Mesculero Pet. Co.
1-17- 9 Santa Fe, Hurst et al.
14- 3- 8 C. J. Stanley et al.
18-22-17 SE, Bluebird Oil Co.
17-20-11 SW, Hufbbell & Hall.
12-30-11 Stein, Miley Oil Co.
3-13-14 State, S. Dysart et al 2.
12-11-11 S. Dysart et al.
11- 4-35 Sanders, Frio Oil Co.
26- 7- 2 Swisher & Wallace.
27-17-16 Chebeauque Synd.
24- 8-23 SE, Lewis et al.
9- 6-24 Grady Oil Co.
12-17-31 Nichols, Ohio Oil Co.
22-19-27 NW, Valley Oil Corp.
8-30- 9 Huntington Park Oil Co.
31- 3-15 NW, Wyoming Colorado Oil Co.
21-30-11 Home Gas Co.
2-19-26 Peckinbaugh, Eureka Oil Co.
1- 3-32 Gurley Oil Co.
24-21-11 SE, Angelus Mining Co.
9-30- 9 Rainbow Oil Co,
29-29-11 Montezuma Synd.
6-29- 9 Detroit Oil Corp.
16-13- 9 Melstead Oil Co. 2.
25-13-21 Standard Pet. 2.
11-20-29 Rawson, William Dooley.
26-18-18 New Mexico Oil Co.
30-28-11 New Mexico Millwaukee Synd.
23-18-15 E. M. Treat & Co.
28-18-28 SE. Quillen & Dunnett.
15-21-23 NW, Zeppenfield Co.
16- 1- 7 Fort Sumner Oil Co.
33-11-35 Tilton & Croft.
Rigs, 15; wells drilling, 136; total, 151.

**WYOMING**

**Wells Completed**

| | | |
|---|---|---|
| 14-40-79 | SW, Wyoming Asso. 13 | 40 |
| 25-40-79 | SW, Wyoming Asso. 22-L | 125 |
| 26-40-79 | SE, Midwest Oil 1-L | 3795 |
| 26-40-79 | NW, Wyoming Asso. 21-L | 35 |
| 14-40-79 | SE, Wyoming Asso. 32 | 107 |
| 35-40-79 | SW, Midwest Oil 6-A | 50 |
| 14-40-79 | NE, Midwest Oil 22-A | 50 |
| 24-40-79 | NW, Wyoming Asso. 18-A | 60 |
| 35-40-79 | NW, Wyoming Asso. 31-L | 1678 |
| 25-40-79 | NW, Wyoming Oil Fields 31-L | 3526 |
| 26-40-79 | NW, Wyoming Oil Fields 36-L | 400 |
| 5-48-90 | Nowood, Cary Oil 1 | dry |
| 29-26-87 | Prod. & Refrs. 3 | gas |
| 29-26-87 | Prod. & Refrs. 18 | gas |
| 10-26-90 | Prairie O. & G. 65-A | 1500 |
| 21-21-86 | Parco, Prod. & Refrs. 1 | dry |
| 27-27-113 | Reese Oil Co. | 50 |

Wells completed . . . . . 17
Production . . . . . 11416
Dry . . . . . 2
Gas . . . . . 2
Gas production . . . . . 2,000,000

**MONTANA**

**Wells Completed**

| | | |
|---|---|---|
| 11-15-29 | Clayton, Continental Oil 14 | dry |
| 30-35- 1 | Stannard, Rice Oil 3-A | 75 |
| 23-35- 1 | Newman, California Pet. 4 | gas |
| 27-35- 2 | Lashbaugh, California Pet. 14 | 25 |
| 5-34- 1 | Putnam, Pass Oil, Ltd. | dry |
| 27-35- 2 | Lashbaugh, California Pet. 12 | 27 |
| 27-35- 2 | Lashbaugh, California Pet. 10 | dry |
| 32-35- 1 | Caine, "56" Pet. 23 | 20 |

13-34- 2 Morton, Trap Oil 2 ..... 10
32-35- 2 Vetch, Butte Kevin Oil 2 .... dry
32-35- 1 Putnam, Ohio Oil 4 ..... 5
33-35- 2 McCormick, Diamond Oil 9 .. 30
3-12-25 SW., Minn.-Flatwillow 3 ..... dry
25-15-25 Winnett Oil 1 ..... dry

Wells completed ..... 14
Production ..... 192
Dry ..... 6
Gas ..... 1

**COLORADO**
**Wells Completed**

8-20-69 Rosie Oil Co. 2 ..... 40
22- 5-91 Knowlton, Texas Prod. 9 ..... dry
35-18-70 Steinmeir, Continental Oil 578 100
35-18-70 Steinmeir, Continental Oil 580 75
34-18-70 Hall, Continental Oil ..... 100
5- 6-86 Irwin-Carstarphen, Texas Prod. ..... 350
19- 8-86 Krause, Union Oil 1 ..... 300
18- 8-68 Johnson, Union Oil 1 ..... 25
30- 8-68 Blunck, Union Oil 2 ..... 250
7- 6-86 Adair, Texas Prod. 2 ..... dry
18- 6-86 Henry Dennis, Texas Prod. 2 200
16- 3-91 Henderson, Marland Oil ..... gas
9-20-69 Continental Oil 577 ..... dry

Wells completed ..... 13
Production ..... 1440
Dry ..... 2
Gas ..... 1
Gas production ..... 20,000,000

**UTAH**
**Wells Completed**

1-30-20 Gibson Dome, Utah Pet. Co... gas

Wells completed ..... 1
Gas ..... 1
Gas production ..... 500,000

**NEW MEXICO**
**Wells Completed**

5-18-27 NE. Swartz et al 1 ..... 50
5-18-27 Empire G. & F. ..... 35
16-17-32 State, Maljamar O. & G. ..... 100
25-11-26 SW. N. Jones 1 ..... 5
30-30-15 Bowman, San Juan Lese. Hold dry
14-29-11 Ransom, R. M. Smith et al... 20
1-17- 9 Hospah, Midwest Explin. ... 100
11-18-27 Etz, Oscar Howard ..... 25

Wells completed ..... 8
Production ..... 335
Dry ..... 1

## KENTUCKY-TENNESSEE

**Summary of Field Operations**

| | Comp. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Warren | 18 | 108 | 1 | 1 | 0 | 13 | 13 |
| Allen | 7 | 15 | 2 | 0 | 0 | 10 | 10 |
| Barren | 11 | 98 | 2 | 0 | 0 | 27 | 27 |
| Ohio | 10 | 754 | 0 | 0 | 2 | 18 | 20 |
| Daviess | 3 | 4 | 1 | 0 | 0 | 2 | 2 |
| Hancock | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Cumberland-Monroe | 5 | 430 | 1 | 0 | 1 | 18 | 19 |
| Simpson | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Casey | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Butler | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Clinton | 4 | 26 | 1 | 0 | 2 | 1 | 3 |
| Adair | 1 | 0 | 0 | 0 | 0 | 1 | 1 |
| Grayson | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Wayne | 3 | 0 | 3 | 0 | 0 | 6 | 6 |
| Lee-Owsley | 3 | 179 | 0 | 0 | 3 | 2 | 5 |
| Wolfe | 2 | 3 | 0 | 0 | 0 | 0 | 0 |
| Estill | 4 | 11 | 0 | 0 | 0 | 6 | 6 |
| Powell | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Morgan | 1 | 5 | 0 | 0 | 0 | 0 | 0 |
| Lawrence-Johnson | 2 | 10 | 1 | 0 | 0 | 2 | 2 |
| Johnson-Magoffin | 12 | 232 | 1 | 0 | 2 | 11 | 13 |
| Floyd-Knott | 1 | 0 | 0 | 1 | 0 | 3 | 3 |
| Knox | 0 | 0 | 0 | 0 | 0 | 5 | 5 |
| Elliott | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Menifee | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Carter | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Laurel | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| McCreary | 1 | 0 | 1 | 0 | 0 | 2 | 2 |
| Bracken | 1 | 5 | 0 | 0 | 0 | 0 | 0 |
| Kentucky | 88 | 1,880 | 14 | 2 | 12 | 139 | 151 |
| Tennessee | 2 | 85 | 0 | 0 | 1 | 22 | 23 |
| Mississippi | 0 | 0 | 0 | 0 | 6 | 9 | 15 |
| Alabama | 0 | 0 | 0 | 0 | 0 | 6 | 6 |
| Florida | 0 | 0 | 0 | 0 | 2 | 11 | 13 |
| Total Feb. | 90 | 1,965 | 14 | 2 | 21 | 187 | 208 |
| Total Jan. | 95 | 1,442 | 20 | 3 | 15 | 181 | 196 |
| Difference | 5 | 523 | 6 | 1 | 6 | 6 | 12 |

**WELLS COMPLETED**
**WARREN COUNTY**

Bowling Green—George Ann Davenport, T. A. Sheridan 6 ..... 2
Hundley-Walters, Roy Hogan 2 ..... 3
L. A. Vance, Lucky Strike Oil 1 ..... 1
J. L. Jenkins, Johnson & Julian 10 ..... 14
D. C. Wheeler, R. B. Walker 5 ..... 3
Robert L. Walthall, R. B. Walker 3 ..... 2
Charles Walthall, R. B. Walker 1 ..... 2
Hurchel Leaton, R. B. Walker 1 ..... 3
J. T. Scott, S. H. Russell & Co. 12 ..... 5
Joe Lightfoot, Guss New 1 ..... gas
C. G. Davenport No. 2, Onsel Brothers & Co. 3 ..... 4
Nick White, J. J. Fort 1 ..... 2
Nick White, J. J. Fort 2 ..... 3
J. W. McGuire, E. Allen 1 ..... dry
Tutt Stoval, J. H. Wright 11 ..... 40
C. G. Davenport No. 2, Onsel Brothers & Co. 12 ..... 16
A. M. Lancaster, Lincoln Oil 1 ..... 3
A. M. Lancaster, Lincoln Oil 2 ..... 6

Wells completed ..... 18
Production ..... 108
Dry ..... 1
Gas ..... 1

**ALLEN COUNTY**

Scottsville—Lon Oliver, Harley & Coatsworth 4 ..... 5
Lon Oliver, Harley & Coatsworth 5 ..... 1
T. K. Brown, Z. Bonner 17 ..... 5
Pinkley Stamps, Moorman & Andrus 18 ..... 2
Riley Hunt, Riley Hunt 3 ..... 2
Smith-Cooksey, Bagley & Kamminski 14 ..... dry
Lank Stovall, Charles Karns 1 ..... dry

Wells completed ..... 7
Production ..... 15
Dry ..... 2

**BARREN COUNTY**

Gorby Pool—Deckard, Breeding & Jones 5 ..... 11
Hade Myers, Mazell Oil 3 ..... 11
Bradford, Esslinger, Scott & Hice 7 ..... 8
Bradford, Esslinger, Scott & Hice 8 ..... 7
Hale, Sinning & Merrifield 2 ..... 5
Lecta Pool—Vance Taylor, Hunt, Mitchell & Leech 3 ..... 6
S. H. Boles, Kentucky Petroleum Synd. & Rennalt 2 ..... 3
Knob Road—Hatfield, J. J. Sayer 7 ..... 7
Hatfield, J. J. Sayer 8, 9 ..... dry
Hatfield, J. J. Sayer 10 ..... 25
Hall-Baker Pool—Darter Brothers Ziegler Brothers 6 ..... 15

Wells completed ..... 12
Production ..... 98
Dry ..... 2

**OHIO COUNTY**

Ambrose Pool—Ambrose heirs, Creek Drilling 2 ..... 250
J. R. Weller, James C. Ellis 4 ..... 250
Ambrose heirs, Creek Drilling 1 ..... 75
I. L. Bartlett, Lee & Engle 1 ..... 30
Alonzo Crow, The Ohio Oil 2 ..... 5
Colyer Pool—J. S. Colyer, Leeper Oil 4 .. 100
Ellis Hines, Young & Price 1 ..... 2
Swope Pool—Guenther-Gant, Chicago Petroleum Synd. 12 ..... 25
Aetnaville—C. Harrison, Loman & Bolling 2 ..... 15
Panther Creek—R. M. Miller, Panther Creek Oil 18 ..... 2

Wells completed ..... 10
Production ..... 754

**DAVIESS COUNTY**

Whitesville—John Roby, Leeper Oil 2 .. 2
T. J. Higdon, Petroleum Exploration 1 ..... 2
C. Gilmore, The Ohio Oil 1 ..... dry

Wells completed ..... 3
Production ..... 4
Dry ..... 1

**CUMBERLAND-MONROE COUNTIES**

Crocus Creek Field—J. H. Morgan, Baird & Hickman 5 ..... 300
John Sharp, J. F. Bolinger 1 ..... dry
G. W. Brockman, Wood-Haislet & Co. 8 ..... 100
Sulphur Creek—Holeman, Oil Fork Development 2 ..... 25
Davidson, Wilcox Brothers 2 ..... 5

Wells completed ..... 5
Production ..... 430
Dry ..... 1

**CLINTON COUNTY**

Albany—Pierce Brothers, McClintock, Reed & Co. 5 ..... 6
Shepley heirs, Dulaney, Ewing & Co. 1 dry
Ed Upchurch, Clinton Oil 2 ..... 10
Louis Wright, Local parties 1 ..... 10

Wells completed ..... 4
Production ..... 26
Dry ..... 1

**WAYNE COUNTY**

District 5—Coffey-Oatts, Porter, Abbot & Co. 6 ..... dry
John Keeton, Rex Carpenter & Co. 3 dry
District 13—Jones heirs, W. O. Souther 5 ..... dry

Wells completed ..... 3
Dry ..... 3

**LEE-OWSLEY COUNTIES**

District 18—J. J. Fraley, Williams, Cawood & Co. 3 ..... 2
Brandenburg, Virgil Edwards & Co. 1 .. 2
Island Creek—J. R. Brewer, Monroe Oil 1 ..... 175

Wells completed ..... 3
Production ..... 179

**WOLFE COUNTY**

District 20—S. & E. R. Chambers, August Girard 3 ..... 1
I. S. Bush, August Girard 1 ..... 2

Wells completed ..... 2
Production ..... 3

**ESTILL COUNTY**

District 8—Mrs. Sawyer, Brenner & Adams 1 ..... 2
Mrs. Sawyer, Brenner & Adams 2 .... 5
S. M. Maple, Wood Oil 2 ..... 3
Dudley Alexander, Superior Oil Corp. 2 ..... 1

Wells completed ..... 4
Production ..... 11

**MORGAN COUNTY**

District 30—Mark Bays, The Hargus Oil 12 ..... 5

**LAWRENCE-JOHNSON COUNTIES**

District 11—Charley Shannon, Tom Hays & Co. 1 ..... dry
District 32—J. J. Gambill, Swiss Oil Corp. 46 ..... 10

Wells completed ..... 2
Production ..... 10
Dry ..... 1

**JOHNSON-MAGOFFIN COUNTIES**

District 25—John N. Conley, Reno Oil 13 ..... 10
Garden Blanton, Atlantic Oil Prod. 23 8
District 27—Frank Peters, Model Oil 3. 2
District 29—Oscar Wheeler, Hudson & Collins 15 ..... 2
H. C. Conley, Hudson & Collins 14 .... 12
District 30—L. D. Holbrook, George & Touma 8 ..... 3
District 31—B. F. Whitt No. 1 Hupp, Duff & Co. 6 ..... 25
B. F. Whitt No. 1, Hupp, Duff & Co. 7 50
B. F. Whitt No. 2, Hupp, Duff & Co. 5 50
J. H. Arnett, Bed Rock Petroleum 25 40
R. L. Sayler No. 2, Burning Fork Oil 4 30
Jess Adams, Model Oil 6 ..... dry

Wells completed ..... 12
Production ..... 232
Dry ..... 1

**FLOYD-KNOTT COUNTIES**

District 21—C. Vanderpool, United Carbon Black 1 ..... gas

**McCREARY COUNTY**

Pleasant Run—Asher, Sampson & Co. 1 dry

**BRACKEN COUNTY**

Bridgeville—Elmer Osborne, Carroll & Gray 1 ..... 5

**TENNESSEE**
**CLAY COUNTY**

Celina—James Arms, Clark, Handon & Munson 1 ..... 35

**PUTNAM COUNTY**

Spring Creek—Moore, George H. Clark 1 50

**WARREN COUNTY**
**Wells Drilling**

Bowling Green—Joe Hobson, Joe Hobson 2.
J. L. Jenkins No. 2, Jennie S. Bright Atty. 4.
J. T. Scott, S. H. Russell & Co. 13.
Cooper Morgan, E. H. Fuller 5.
Richard Carpento, B. B. Baker 7.
J. F. Young, Penn Oil Prod. Synd. 7.
C. P. Amos, Lucky Strike Oil 1.
D. C. Butler, Thessen & Cupler 3.
E. J. McClain, Garland R. Sledge 6.
Ora S. Davenport, Ruth Turner 5.
Keller, Alf F. Hughes 1.
Tutt Stovall, J. H. Wright 12.
C. G. Davenport No. 2, Onsel Brothers & Co. 13.
Wells drilling, 13.

**ALLEN COUNTY**
**Wells Drilling**

Scottsville—Jim Bradley, Reaher & Co. 1.
I. Strait, Dodson & Strait 1.
Connie Justice, James Dobie 1.
Max Willoughby, Dye & Dye 1.
Jess Stitt, Frank Duchen 1.
Aria Wade, J. R. Poynter & Co. 1.
Gen'l Wood 2,700 acres, Grace Oil 8.
Riley Hunt, Riley Hunt 5.
Lon Oliver, Harley & Coatsworth 6.
Lee Moore No. 2, Lee Moore 8.
Wells drilling, 10.

**BARREN COUNTY**
**Wells Drilling**

Gorby Pool—M. Y. Chamberlain, J. W. Porter & Co. 4.
Emery-Moore Pool—Bishop, Bishop & Co. 2.
Dausey, Gassaway Brothers 1.
Deckard, Breeding & Jones 6, 7.
Delond, Allen & Hartzel 3.
Steffy, Ruby Oil 10.
Hale, Sinning & Merrifield 3.
Hade Myers, Mazell Oil 4.
Lecta Pool—Dean, Esslinger Oil 11, 12.
Dean, Ziegler Brothers 2, 3.
Browning, Sanson, Norris Bros. & Co. 2.
C. B. Jones, Norris Bros. & Harrington 1.
Vance Taylor, Hunt, Mitchell & Leech 4.
S. H. Boles, Ky. Pet. Synd. & Rennalt 3.
Glasgow—Jones, J. R. Elliott 2, 4.
McGuire, Stohr Bros. Oil Corp. 5.
Kinslow, J. R. Elliott 15.
Knob Road—Richardson, Star Oil & Gas 18.
Hatfield, J. J. Sayer 11, 12.
Hall Baker—Darter Bros., Ziegler Bros. 7.
Temple Hill—Foster, T. L. Gorby & Co. 1.
Unknown, Fred Williams 1.
Wells drilling, 27.

**OHIO COUNTY**
**Rigs**

Sunnydale—Mark Renfrow, Cooper & Black 1.
Rosine—Ur. an Miller, Rowe & Co. 1.
**Wells Drilling**

Ambrose Pool—James Ellis, The Ohio Oil 8, 9.
Alonzo Crow, The Ohio Oil 3.
Ambrose heirs, Creek Drilling 3, 4.
J. R. Weller, James C. Ellis 5, 6.
I. L. Bartlett, Lee & Engle 2.
Evans Pool—Claud Farmer, Petroleum Exploration 1.
Collier Pool—J. S. Colyer, Leeper Oil 5.
Ellis Station—J. B. Ellis, White Plains Oil & Gas 6.
Panther Creek Pool—R. M. Miller, Panther Creek Oil 19.
Scattered—V. R. Ferguson, Wood Oil 1.
Dean & Owen, Wood Oil 3.
D. Weseterfield, Creek Drilling 1.
Greenbrier—L. D. Fulkerson, Ohio Oil 1.
N. E. Part County—Chenault Brothers & Thompson 1.
Aetnaville—C. Harrison, Loman & Bolling 3.
Rigs, 2; wells drilling, 18; total, 20.

**DAVIESS COUNTY**
**Wells Drilling**

Whitesville—John Roby, Leeper Oil 3.
Pullinan, Bert Thompson 1.
Wells drilling 2.

**HANCOCK COUNTY**
**Rig**

Pellville—C. H. Henning, E. W. Stebbins 1.

**CUMBERLAND-MONROE COUNTIES**
**Rig**

Crocus Creek—Sand Lick, Berthold & Waddle 1.
**Wells Drilling**

Crocus Creek—John Sharp, J. F. Bolinger 2.
Finnis Baker, Baird & Hickman 2.
Fulton Grider, Baird & Hickman 5.
S. Elliott, Crawford & Co. 2.
Hi Jackman, Crawford & Co. 1.
Burkesville—D. Garmon, Wilcox Bros. 1.
Goose Creek—Williams, Thresher, Shouse & Co. 1.
Sulphur Creek—J. B. Riddle, Hook & McComas 2.
Rush, Kanawha Oil 2.
Holeman, Oil Fork Development 3.
Bear Creek—J. M. Dickens, E. M. Treat & Co. 7.
Steele Fork—Sarah Shackles, Wilcox Bros. 5.
Pulsey Creek—T. B. Hogan, W. S. Raydure Son 1.
H. M. Hughes, McClintock, Reed & Co. 4.
Kettle Creek—H. L. Blythe, Connell, Zook & Co. 2.
J. Jones, Graves Bros. & Co. 1.
Milt Smith, Smith & Smith 1.
Hiram Wells, Foster Mitchell 1.
Rig, 1; wells drilling, 16; total, 19.

**SIMPSON COUNTY**
**Well Drilling**

Franklin—John Pearce, A. L. Mullen & Co. 3.

**CASEY COUNTY**
**Rig**

Near Avon—Hammonde, Col. Less Combest 1.

**BUTLER COUNTY**
**Wells Drilling**

Morgantown—Evans, P. A. & B. A. Evans 1.
Otto Pendley, Roy Hogan & Co. 1.
W. A. Newton, Fowler, Anderson & Hogan 1.
Wells drilling, 3.

**CLINTON COUNTY**
**Rigs**

Wolfe River—Amalon Phillips, Bryson & Stinson 1.
Fanny's Creek—Mrs. M. A. Pierce, Sells Oil & Gas 1.
**Well Drilling**

Wolf River—James Scott, Owens, Long & Co. 1.
Rigs, 2; well drilling, 1; total, 3.

**ADAIR COUNTY**
**Rig**

Gradyville—Keith, Okla. parties 1.

**GRAYSON COUNTY**
**Wells Drilling**

Leitchfield—Carville, Robinson & Co. 1.
Jones, Robinson & Co. 1.
Wells drilling, 2.

**WAYNE COUNTY**
**Wells Drilling**

District 2—T. T. Davis, Vulcan Oil 18.
H. C. Coffey, Somerset Oil 1.
District 3—Steele heirs, Beaver Pet. 13.
Stearns Lumber & Coal, Pigeon Rock Oil 11.
District 13—Jones heirs, W. O. Souther 6.
J. B. Stinson, Kennedy, Taylor & Co. 5.
Wells drilling, 6.

**LEE-OWSLEY COUNTY**
**Rigs**

Island Creek—McGeorge, Unknown parties 1.
Peters, Petroleum Exploration 1.
J. F. Brewer, Monroe Oil 2.
**Wells Drilling**

District 18—Wylie Bryant, Cook & Co. 2.
District 36—Baker, Watkins & Co. 1.
Rigs, 3; wells drilling, 2.

**ESTILL COUNTY**
**Wells Drilling**

District 7—John Bill Rogers, Mt. Springs Oil 15.
District 8—William Neal, Wood Oil 15.
Joe Neal, Wood Oil 3.
Bud Briniger, Wood Oil 10.
Simp Horn, Superior Oil Corp. 28, 29.
Wells drilling, 6.

**POWELL COUNTY**
**Well Drilling**

District 15—John A. Rogers, W. O. Dunham 6.

**LAWRENCE-JOHNSON COUNTIES**
**Wells Drilling**

District 22—W. W. Bailey, Garrison & Townsend 6.
District 32—W. M. Ross, S. E. Lohman 5.
Wells drilling, 2.

**JOHNSON-MAGOFFIN COUNTIES**
**Rigs**

District 27—J. J. Prater, Model Oil 2.
W. L. May, S. J. Patrick 2.
**Wells Drilling**

District 25—Patton Borders, Reno Oil 10.
District 30—Lee Owens, Oliver Jenkins 2.
Bracken heirs, Phillips & Young 4.
W. M. Turner, F. G. Rice & Co. 1.
Joe Cole, Page & Dunham 1.
L. D. Holbrook, George & Touma 9.
District 31—Jack Whittaker, Stanford & Outram 1.
B. F. Whitt No. 1, Hupp, Duff & Co. 8.
B. F. Whitt No. 2, Hupp, Duff & Co. 6.
R. L. Salyer No. 2, Burning Fork Oil 5.
J. H. Arnett, Bed Rock Pet. 26.
Rigs, 2; wells drilling, 11; total, 13.

**FLOYD-KNOTT COUNTIES**
**Wells Drilling**

District 21—Green Howard, Ivyton Oil & Gas 1.
Beaver Creek Coal, Ivyton Oil & Gas 1.
F. R. Hayes, Distell-Martin Oil & Gas 1.
Wells drilling, 2.

**KNOX COUNTY**
**Wells Drilling**

Indian Creek—Helton, Pet. Ex. 2.
Bailey Switch—Dizney, Dizney & McKee 1, 2.
Sinking Creek—Foreman, Foreman Lbr. 1.
Red Bird Creek—Unknown, Beattyville parties 1.
Wells drilling, 5.

**ELLIOTT COUNTY**
**Wells Drilling**

District 34—J. F. Dials, Edra Lee O. & G. 6.

**MENIFEE COUNTY**
**Well Drilling**

District 9—Unknown, W. O. Bach 1.

**CARTER COUNTY**
**Wells Drilling**

Smokey Hollow—High Owens, R. A. Chiles 1.
Rough Camp Creek—Robins & Watson 1.
Wells drilling, 2.

**LAUREL COUNTY**
**Well Drilling**

10 Miles South of London—Standard Oil of Kentucky 1.

**McCREARY COUNTY**
**Wells Drilling**

Pleasant Run Creek—McCreary O. & G. 1.
Asher, Sampson & Co. 2.
Wells drilling, 2.

**TENNESSEE**
**CLAY COUNTY**
**Wells Drilling**

Celina—Willie White, Blick & Co. 2.
Geo. Tinsley, Lewis & George 1.
Geo. Plumley, John H. Kerr 1.
Mill Creek—Chas. Short, Burman & Pierce 1.
Barton Lanford, John H. McClurkin 2.
Barton Lanford, Ohio Oil 3.
Peterman Bend—Neeley, H. Z. Clark 1.
Sam Keisling, J. L. Miller & Co. 2.
Clark Pool—Stone, H. Z. Clark Oil 1.
A. F. Davis, Dixon, Bayless & Douglas 3.
Near Oakley—Empire Gas & Fuel 1.
Knob Road—E. S. Dalton, Unknown 1.
Fox Springs—Mrs. Mary E. Williams, A. L. Pratt & Co. 4.
Willow Grove—Widow Hargrave, Carnahan & Horn 2.
Jim Stover, A. A. Alexander 2.
Near Timothy—Leech & Co. 1.
Wells drilling, 16.

**PUTNAM COUNTY**
**Wells Drilling**

Sinking Creek—J. A. Drake & Co. 1.
Buffalo Valley-Tennessee—Alabama parties 1.
Wells drilling, 2.

**PICKETT COUNTY**
**Wells Drilling**

Juetts Creek—B. C. Arney, Clark Oil 2.
Mary Harrison, Owens & Turner 2.

Luther Martin, Bryson & Stinson 1.
Wells drilling, 3.

**DEKALB COUNTY**
**Rig**

Caney Fork River—A. W. Austin, Medlen & Co. 1.

**RUTHERFORD COUNTY**
**Well Drilling**

Murfreesboro—G. H. Alsup, Rutherford Co. Oil & Gas 1.

**MISSISSIPPI**

**FRANKLIN COUNTY**
**Rig**

Jackson—Pearl River, New York parties 1.

**COPIAH COUNTY**
**Rig**

Hazlehurst—Brandywine, Benj. J. White 1.

**KOSCUSKI COUNTY**
**Rig**

Near Alta—B. B. Jones 1.

**ITAWAMBA COUNTY**
**Rig**

Fulton—Due Steel Oil of Los Angeles 1.

**SIMPSON COUNTY**
**Rigs**

Sec. 15-2-4—Graver & Fields 1.
Sec. 34-4-3—B. Livingstone & Co. 1.
Rigs, 2.

**YAZOO COUNTY**
**Well Drilling**

Sec. 15-13-1w—Reed, Free Run Oil 1.

**WASHINGTON COUNTY**
**Well Drilling**

Sec. 30-14-9—Allen, Alhambro Oil 1.

**TISHOMINGO COUNTY**
**Well Drilling**

Iuka—Unknown parties 1.

**TALLAHATCHIE COUNTY**
**Well Drilling**

Sec. 23-25-22—Harvey, Local Company 2.

**MADISON COUNTY**
**Wells Drilling**

Tolis—Transcontinental Oil 1.
Roxana Petroleum 1.
Wells drilling, 2.

**STONE COUNTY**
**Well Drilling**

Sec. 36-3-2—Near Magic City, local company 1.

**MONROE COUNTY**
**Well Drilling**

Sec. 29-13-17—Darrett, Quincy Oil 1.

**WEBSTER COUNTY**
**Well Drilling**

7 Miles West of Cumberland—Barney Baize 1.

**ALABAMA**

**MORGAN COUNTY**
**Well Drilling**

Sec. 6-6-4—English, Decatur Oil 1.

**HALE COUNTY**
**Well Drilling**

Greensburg—Hale Oil 1.

**SHELBY COUNTY**
**Well Drilling**

Chelsea—Scott, Cooksey & Co. 1.

**WILSON COUNTY**
**Well Drilling**

Selma—Blue Belle Oil 1.

**FRANKLIN COUNTY**
**Well Drilling**

Sec. 28-8-14—Hobson, Pittsburgh Oil & Development 1.

**MARION COUNTY**
**Well Drilling**

Sec. 29-11-14—Clark, P. J. McAlpin 1.

**FLORIDA**

**MONROE COUNTY**
**Rigs**

Sec. 6-51-31—Florida Natural Resources 1.
Sec. 6-35-34—Biscayne O. & G. of Miami 1.
Rigs, 2.

**POLK COUNTY**
**Well Drilling**

Sec. 10-32-27—West Frostproof Land & Oil 1.

**GLADES COUNTY**
**Wells Drilling**

Sec. 13-39-32—Brewton, H. McCurdy 1.
Sec. 5-38-2—Langford & Co. 1.
Sec. 5-38-32—Seminole Pet. Corp. 1.
Wells drilling, 3.

**JEFFERSON COUNTY**
**Well Drilling**

Sec. 19-2-5e—Miller-Gossard, Southern States Oil Corp. 1.

**MANATEE COUNTY**
**Well Drilling**

Sec. 15-34-17—Robinson, Speedwell Petroleum Synd. 1.

**DADE COUNTY**
**Well Drilling**

Sec. 19-54-35—Tamiami Trail, Miami Oil & Natural Gas 1.

**LEON COUNTY**
**Well Drilling**

Sec. 20-2-1e—Rhodes, Gulf Oil Dev. 1.

**HERNANDO COUNTY**
**Well Drilling**

Sec. 20-23-19—Unknown parties 1.

**PASCO COUNTY**
**Well Drilling**

Sec. 25-25-16e—Unknown parties 1.

**OKEECHOBEE COUNTY**
**Well Drilling**

Sec. 22-36-35—Opal District, Preston & Gaines 1.

## EASTERN FIELDS

**Summary of Wells Completed**

| Fields— | Comp. | Prod. | Dry | Gas |
|---|---|---|---|---|
| Allegany | 29 | 55 | 6 | 0 |
| Bradford | 127 | 275 | 0 | 0 |
| Middle Field | 1 | 1 | 0 | 0 |
| Venango-Clarion | 29 | 42 | 1 | 2 |
| Butler-Armstrong | 10 | 21 | 3 | 3 |
| S. W. Pennsylvania | 17 | 147 | 4 | 7 |
| West Virginia | 65 | 230 | 11 | 10 |
| S. E. Ohio | 70 | 1,308 | 4 | 17 |
| Total Feb. | 348 | 2,079 | 23 | 69 |
| Total Jan. | 363 | 2,447 | 34 | 69 |
| Difference | 15 | 368 | 11 | 0 |

**Summary of Work Under Way**

| Fields— | Rigs | Drlg. | Ttl. |
|---|---|---|---|
| Allegany | 12 | 26 | 38 |
| Bradford | 25 | 91 | 116 |
| Middle Field | 0 | 6 | 6 |
| Venango-Clarion | 4 | 12 | 16 |
| Butler-Armstrong | 9 | 8 | 17 |
| S. W. Pennsylvania | 10 | 33 | 43 |
| West Virginia | 45 | 135 | 180 |
| S. W. Ohio | 41 | 101 | 142 |
| Total Feb. 28 | 146 | 412 | 558 |
| Total Jan. 31 | 167 | 487 | 654 |
| Difference | 21 | 75 | 96 |

### WELLS COMPLETED

**Allegany Field**

Empire Ltd., E. L. Gorton et al. 1
Fee, McKean Natural Gas. water
Cleveland, S. J. Cleveland et al 4
Fee, Hill & Son 1
Fee, Albert Oil 1
Fee, Empire Ltd. 2
Fee, Empire Ltd. et al 2
Albert Oil, M. E. Sloan Est 1
Fee, C. M. Robinson 2
Fee, Robert J. Dermott 1
Fee, J. E. LeSuer et al 1
Coast et al, M. J. Crowley et al. 2
McDermott, Wilbart Oil water
Fee, Gilligan & Dermitt 5
Fee, McDivitt et al. 4
Fee, E. L. McDivitt 1
South Penn Oil et al, First Trust, Wys. 3
Fee, Martin Bros. et al. 2
Fee, C. H. Lavens et al. 2
Fee, Wm. Bartoo 1
Kinley Oil, Ed Hungerfore et al 1
Fee, William Weinang 1
Fee, Leland Oil 1
F. D. & B., W. J. Fitzgerald 2
Fries, N. V. V. Franchot, mgr. trust 6
Fee, N. V. V. Franchot, mgr. trust. 2
Brandel heirs, N. V. V. Franchot, mgr. trust 3
Fee, Kinley Producers. 1
Fee, John C. Minderler Jr 1

Wells completed 29
Production 55
Water 2

**Bradford Field**

Fee, D. M. Hoffman Est. 1
Fee, Penna Oil Prod. Refg. et al 1
Fee, Penna Oil Prod. Refg. et al 1
Fee, Penna Oil Prod. Refg. et al. 1
Russell, Potter & Devore 1
Fee D. J. Moody 1
Fee, E. D. Kepner Oil. 10
Fee, V. G. Smith 6
Loop Est., N. V. V. Franchot Trust 15
Rounds, J. W. Kaufman. 10
Rounds, J. W. Kaufman. 15
Campbell, J. W. Kaufman 3
Hodge, South Penn Oil 2
Sill, Hope Oil 1
Whipple, South Penn Oil 1
Enterprise, South Penn Oil 2
Ekas, Lloyd & Piper 1
Ekas, Lloyd & Piper 1
Ekas, Lloyd & Piper 1
Germer, Linwood Oil. 1
Campbell, Miller et al 1
Lovell, Tomes, Melvin et al 1
Fee, G. A. Simpson 1
Corwin, Simon Bros 1
Fee, B. Devlin 2
Taylor, Forest Oil 2
Taylor, Forest Oil 1
Taylor, Forest Oil 2
Taylor, Forest Oil (4 wells) water
Fisher, Forest Oil 2
Fisher, Forest Oil 1
Fisher Forest Oil 2
Fisher Forest Oil 2
Fisher, Forest Oil (5 wells) water
Chamberlain, T. H. Kennedy 2
Fee, F. S. Boquin 2
Lincoln, L. H. Smith & Sons 2
Allen, A. Schorman 1
Saunders, A. Schorman 2
Borden, Rapp & Schwab. 2
Keating, Sloan & Zook 1
Wommer, Patton & Wilson 1
Baldwin, F. E. Baldwin 1
Porter, Forest Oil 2
Duke, Staley & Thomas 1
Baldwin, C. B. Kervin 1
Marvin, Potter & Devore 2
Norton, Kahle Oil. 2
Middaugh, A. L. & M. L. Lilly. 2
Elder, S. H. Elder & Co. 3
Wright, Cotton & Moore. 1
Vincent, Wright, Burdick et al 1
Jones, South Penn Oil 221. 1
Davis, South Penn Oil 27. 1
Lee, Hallock & Weston, South Penn 100 1
Bing, 151-154, South Penn Oil 37 1
Dent, South Penn Oil 108 2
Buchanan, South Penn Oil 04. tubed
Whipple, South Penn Oil 130. 1
Middaugh, South Penn Oil 52. 1
Blair, South Penn Oil 012 tubed
Rounds, South Penn Oil 59 2
Midland, Taylor, South Penn Oil 39 2
Kendall, South Penn Oil 60 1
Bing, 439, South Penn Oil 109 1
Smith, South Penn Oil 138 1
Bing, 423, South Penn Oil 01 tubed
Rew & Hodge, South Penn Oil 03 tubed
Bing, 533, South Penn Oil 86. 2
Tract 23, Hazelwood Oil 97 1
Bing, 296, Andrus & McDowell 109. 2
Elder, S. H. Elder et al. 20 3
Lawton, Suhr, McSweeney & Co. 84 2
Bing, 386, Hooper & Co. 21. 1
Rew, Bovaird & Hamlin 35 2
Rew, Bovaird & Hamlin 36. 2
Bing, 541, Park & Bovaird 40 1
Bing, 500, Daly & Healy 35 3
Bing, 370, R. H. & James George 31 8
Bing, 369, D. W. Daly 63. 2
Goodrich, Wal Oil & Gas 2 1
Rounds & Lawrence, South Penn Oil 61 2
Weston Jr., tr., South Penn Oil 99 10
Windsor, Wilson & Co. 14 1
Weston Jr., tr., South Penn Oil 100 3
Fee, Forest Pet. Corp. No. 1 1A40 2
Burns et al., E. Daly 10 4
Fee, M. C. Reidy 16 2
Fee, W. E. Williams 22 2
Fee, J. G. McAndless 16 2
Fee, Park Est. et al. 12 2
Fee, Park Est. et al. 13 2
Fee, W. F. Sprague 17. 1
Fee, Hazlewood Oil 53 1
Fee, Vincenzo Mongillo 6. 2
Franchot, E. R. Maxwell et al 16 2
Fee, J. A. Walters Est. 49. 2
Franchot, Melvin & Towne 8. 2
Fee, C. B. Kervin 2
Fee, South Penn Oil 5
Rutherford Est. Forest Oil Corp. 3 3
Fee, South Penn Oil 1
Fee, South Penn Oil. water
Fee, W. C. Kennedy Co. 58 5
Bing, 150, South Penn Oil 78 2
Bing, 151, South Penn Oil 37. 5
Fee, South Penn Oil 108 2
Fee, R. O. Landers et al 1
Fee, Edwin Jack et al 1
Bing, 390, South Penn Oil. 2
Fee, T. H. Kennedy No. 6. 2
Dennis, Mary A. Dennis et al 2
Bing, 423 South Penn Oil 17 water
Bing, 439, South Penn Oil 100 5
Bing, 482, South Penn Oil 28. water
Bing, 533, South Penn Oil 86. 1
Bing, 533, South Penn Oil 87 5
Bing, 580, P. A. Oakes & Sons 25 5
Bing, 576, South Penn Oil 118. 1
Bing, 582, Associated Producers 378 6

Wells completed 127
Production 275
Water 12

**Middle Field**

Smith, McCool Bros. 1

**Venango-Clarion**

Eakin, John L. Eakin 29. 1
Porter, Smith & Walters et al. 39 1
Cox, George H. Torrey 7 1
Doyle, Brundred Oil 13 1
Kern, C. B. Kern 16. 1
McClintock, George Nelson 1. 2
Nelson, Goldstein & Nusbaum 13 1
Foster Farm Oil, Jenkins & Grimm 23. 1
Foster Farm Oil, Walters & Grimm 24 1
Wright, Graham & Scott 37. 1
Heidekooper, Southern Oil 1. 1
Corbett & White, Corbett & White 3 1
McNellie, Midland Oil 29. 3
McNellie, Midland Oil 30. 1
Kuhns, Braymer & Ritze 2. 2
Osborn, Rice & Thompson 5 2
Wright, Graham & Scott 37. 1
Gearing heirs, R. L. Lamberton 1 1
Criswell, Richland Oil & Gas 1 1
Criswell, Richland Oil & Gas 2. 1
Criswell, Richland Oil & Gas 3 1
Shawkey, Alum Rock Gas 3 6

**Clarion—**

Stubler heirs, George Stubler acct. 2. 7 gas
Gillingham, John Gillingham 1 gas
Rowan, C. L. Wedekind 4. 1
Kiser, John Furman et al. 1. dry
Stewart, Neely & Clover 6 4

**Forest—**

Lot 3183, Mensch, Shields & Mensch 1

**Mercer—**

Doyle Est., W. D. Doyle 13. 4

Wells completed 29
Production 42
Dry 1
Gas 2

**Butler-Armstrong**

Paul, Hinchberger & Co. 1. dry
Glendenning, American Natural Gas 15
Elliott, Sam Sherwin 1 3
Black, Kepple, Murtland et al. 1 1
Holben, Ritzert Bros. & Holben 1. gas
Sheakley, J. S. Walker 1 dry
Dambach, Dambach, Stevenson O. & G. 2 gas
Peffer, E. H. Hutchison 3 dry
Purvis, J. C. Trees 2. gas
McKinney, Campbell, Hutchison et al. 7 2

Wells completed 10
Production 21
Dry 3
Gas 3

### ALLEGANY FIELD

**Rigs**

Breckenridge et al., H. W. Breckenridge et al.
Fee, Empire Ltd. et al.
Fee, Empire Ltd.
Fee, Empire Ltd.
Fee, State Bank, Bolivar Nos. 28-29.
McDermott, Wilbart Oil.
Fee, McDivitt et al.
Coast et al., M. M. Crowley et al.
Fee, Gilligan & Dermott.
Fee, Martin Bros. et al.
Kinley Oil, W. J. Weller et al.
Zeliff, Carmody & Fessenmyer.

**Wells Drilling**

Fee, C. M. Barnes.
Fee, McKean Natural Gas.
Fee, F. E. Richart et al.
Fee, Empire Ltd.
Fee, J. W. Johnson et al.
Fee, J. E. LeSuer et al.
Crandall, Wightman & Crandall.
Fee, E. L. McDivitt.
South Penn Oil et al., First Trust, Wys.
Fee, A-C-A Oil Corp.
Fries, N. V. V. Franchot, mgr. trust.
Fee, N. V. V. Franchot, mgr. trust.
Merill et al., N. V. V. Franchot, mgr. trust.
Fee, Kinley Oil.
Kinley Oil, J. S. Moody et al.
Multrus fee, C. M. Lippert et al.
Lippert, C. M. Lippert et al.
Warters et al., E. D. Quinlan et al.
Fee, Leland Oil.
Multrus fee, Sepany Oil.
McCaffery & Westran,, Mrs. H. S. Westran.
Ryan, M. Shear.
Fee, Arch J. Mooney.
Fee, George H. Zink.
Fee, John C. Minderler Jr.
F. D. & B., W. J. Fitzgerald.
Rigs, 12; wells drilling, 26; total, 38.

### BRADFORD FIELD

**Rigs**

Elder, S. H. Elder & Co.
Fee, Mix Creek Oil (2 rigs).
Bing, 541, Park & Bovaird 41.
Elder, S. H. Elder et al. 21.
Bing, 423, South Penn Oil 15.
Bing, 370, Hazelwood Oil 76.
Bing, 494, South Penn Oil 59.
Bing, 533, South Penn Oil 88.
Bing, 568, Associated Producers 384.
Bing, 583, Associated Producers 381.
Kennedy & Clark, Phoenix Oil 168.
Bing, 151, South Penn Oil 38.
Fee, South Penn Oil 109.
Bing, 453, South Penn Oil 90.
Fee, W. F. & W. W. Carmenter 60.
Bing., Hazelwood Oil 131.
Fee, South Penn Oil 36.
Fee, South Penn Oil.
Weston Jr., tr., South Penn Oil 101.
Keating fee, South Penn Oil.
Keating fee, South Penn Oil.
Fee, W. E. & W. W. Carmenter 35.
Fee, Dana & Dana 46.
Franchot, Melvin & Towne No. 9.

**Wells Drilling**

Whipple, South Penn Oil.
Ekas, Lloyd & Piper (3 wells).
Lovell, Tomes, Melvin et al.
Taylor, Forest Oil (8 wells).
Fisher, Forest Oil (9 wells).
Chamberlain, T. H. Kennedy.
Wilson, Denwood Oil.
Meechan, A. J. Vantine.
Richardson, Hope Oil.
Wommer, Patton & Wilson
Porter, Forest Oil.
Baldwin, C. D. Kervin.
Middaugh, A. L. & L. M. Lilly.
Potter, W. E. Burdick.
Bingham, J. L. Yerdon.
Fee, E. D. Kepner Oil.
Basey, R. A. & A. Stambaugh.
Fee, Mix Creek Oil.
Fee, D. M. Hoffman Est.
Potter, Burdick & Stone.
Goodrich, Wal Oil & Gas 3.
Bing, 296, Andrus & McDowell 110.
Bing, 386, Hooper & Co. 22.
Morse Est., Love, Elder et al. 28.
Lawton, Esther Penn, Inc.
Bing, 391, George W. Bovaird 86.
Bing, 464, R. S. Pringle 21.
Bing, 368, Wilson & Fitzgibbon No. 2. 12.
Bing, 500, Daly & Healy 36.
Bing, 369, D. W. Daly 64.
Tract 27, Hazelwood Oil 130, 131.
Tract 21, Hazelwood Oil 01.
Jones, South Penn Oil 22.
Bing, 151-154, South Penn Oil 34.
Midland Taylor, South Penn Oil 40.
Rumsey, South Penn Oil 130.
Kendall, South Penn Oil 61.
Midland Keating, South Penn Oil 03.
Melvin, South Penn Oil 13.
Blair, South Penn Oil 011.
Bing, 400 acres, South Penn Oil 77.
Bing, 369, South Penn Oil 01.
Kane leases, South Penn Oil 111.
Midland Taylor, South Penn Oil 119.
Bing, 501, South Oil 03.
Bing, 400 acres, South Penn Oil 78.
Culbertson lots, South Penn Oil 64.
Lots 5 and 6, South Penn Oil 01.
Culbertson lots, South Penn Oil 59.
Smith, South Penn Oil 139, 140.
Bing, 212, South Penn Oil 43.
Cotton, South Penn Oil 56.
Bing, 416, South Penn Oil 11.
Bing, 494, South Penn Oil 60.
Bing, 568, Associated Producers 385, 387.
Bing, 576, South Penn Oil 119.
Fee, J. V. Golden 24.
Kinley Oil, Louis Schenfield 8.
Fee, Park Est. et al. 14, 15.
Fee, F. M. Johnston & Son 25.
Flickinger, C. B. Kervin.
Fee, South Penn Oil.
Bing, 398, South Penn Oil.
Fee, E. K. Kane 46.
Kennedy & Clark, South Penn Oil 111.
Fee, Benson & Benson 4.
Bing, 151, South Penn Oil 34.
Bing, Hazelwood Oil 130.
Fee, W. C. Kennedy Co. 59.
Fee, South Penn Oil.
Rigs, 25; wells drilling, 91; total 116.

### MIDDLE FIELD

**Wells Drilling**

Lot 40, Kinzua Valley Chemical
Ulf, Fidelity Petroleum.
Lot 3767, F. J. Moser 35.
Lot 420, Sloan Zook Co. 49.
Lot 7, J. G. Cochran 51.
Lot 2, J. B. Hadden.
Wells drilling, 6.

### VENANGO-CLARION

**Rigs**

Shawkey, Alum Rock Gas 4.
Kapp, W. B. & F. E. Kapp 5.

**Clarion—**

Johnston, M. H., G. & L. K. Johnston 3.
Williams, Dale, Shaffer, Hook et al 4.

**Wells Drilling**

Diamond, J. & L. Diamond 5.
Hollister, J. C. Atwell 15.
Cox, George H. Torrey 8.
Craig, Archie E. Fritz 2.
Atwell, Hoffman, Craig et al. 31.
McNellie, Midland Oil 31.
McLaughlin, Thomas McLaughlin 2.

**Clarion—**

Groner, Alum Rock Gas 2.
Kahle, A. D. Shorts et al. 5.
Kroh, E. E. Kroh 2.
Garis, Alum Rock Gas 7.
Beck tract, W. J. Baker.
Rigs, 4; wells drilling, 12; total 16.

### BUTLER-ARMSTRONG

**Rigs**

Marshall, R. A. Marshall 1.
Deiter, N. Deiter & Co. 1.
McBride, Fennell & Co. 2.
Shroup, Chas. Hilderbrand 6.
Myers, Holben, Iman et al. 2.
Lachner, Lachner, Garing et al. 1.
Niblock, J. A. Elliott et al. 3.
Rea, Amberson 1.
Boggs heirs, R. C. & W. V. Binkerd.

**Wells Drilling**

Wagner heirs, E. C. Hatcher et al. 3.
Wilson, P. McCann & Co. 1.
Iman, Hugh Iman 2.
Barkley, M. B. Finnessy 23.
Sterrett, Hartman et al. 1.
McKinney, Edward McKinney 4.
Bovard, Robinson & Berry.
McNaughton, West Penn Oil.
Rigs, 9; wells drilling, 8; total, 17.

### SOUTHWEST PENNSYLVANIA

**Wells Completed**

**Washington County—**

Hugses & Day, Manfrs. L. & H. Co. 3 25
Weir, Carnegie Gas Co. 1. 10

**Allegheny County—**

Behr-Bunnack, Morse O. & G. Co. 1. 100
Wilson, Moore Oil Co. 4. dry
Hamilton, Bod Oil Co. 4 2
Clever, M. Clever 3 dry
Eaton, Limk O. & G. Co. 1 gas

**Greene County—**

Henderson lot, Carnegie Gas Co. 1 gas
Morris, Carnegie Gas Co. 1. dry
Ross, Jeanette O. & G. Co. 1. gas
Barkley, J. L. Garad, 1. gas
Jones, Mfrs. L. & H. Co. 1. gas
Rutan, Consumers Fuel Co. 4 105
Phillips, Carnegie Gas Co. 1 gas
Patterson, Carnegie Gas Co. 1 gas
R. G. Rutan, Ed Wagner 1 5
Fonner, Mfrs. L. & H. Co. 2. dry

Wells completed 17
Production 147
Dry 4
Gas 7

### WASHINGTON COUNTY

**Rigs**

Miller Bros., McKinney & Co. 1.
Dinsmore, Hickory Penn 1.

**Wells Drilling**

Phillips, Percy Tombaugh 1.
Post, A. V. Lewis 1.
McCalmont, Hickory Penn O. Co. 1.
Ewing heirs, Hickory Penn O. Co. 1.
Sleith heirs, Dallmyer & Co. 2.
Ahrem heirs, Walters & Co. a.

Rankin heirs, Dallmyer & Co. 2.
Russell, Phila. Gas Co. 2.

**ALLEGHANY COUNTY**
**Wells Drilling**

Weir, Geo. Weir 2.
Lanz heirs, Harbison & Co. 1.

**BEAVER COUNTY**
**Well Drilling**

O'Neill, Abrams & Co. 1.

**GREENE COUNTY**
**Rigs**

Headlee, So. P. O. Co. 3.
Morris, Carnegie Gas Co. 2.
Henderson lot, Carnegie Gas Co. 2
Fox, Peoples Gas Co. 1.
Gerard, J. L. Gerard 7.
Rutan, Consumers Fuel Co. 3.
J. S. Rutan, Consumers Fuel Co.
Ell, Mfrs. L. & H. Co. 1.
**Wells Drilling**
Wright, Carnegie Gas Co. 2.
Long, Carnegie Gas Co. 1.
Jones, Carnegie Gas Co. 1.
Bowers, Carnegie Gas Co. 2.
Morris, Phila. Co. 1.
Henderson, Phila. Co. 1.
Lemley, Moore-Tex O. & G. Co. 1.
E. Lemley, Dunn Mar. O. & G. Co. 1.
Smith, N. G. Co. of W. Va. 6.
Whipskey, McCracken & Co. 1.
Morris heirs, Morris O. & G. Co. 1.
Gump, Milliken & Co. 1.
Hogan, Meals & Co. 6.
Anderson, Consumers Fuel Co. 5.
J. S. Rutan, Consumers Fuel Co. 4
J. S. Rutan, Carnegie Gas Co. 5.
Walters, Carnegie Gas Co. 1.
Breese, Carnegie Gas Co. 1.
T. F. Rutan, N. G. Co. W. Va. 8.
Phillips, Mfrs. L. & H. Co. 1.
Huffman, Phila. Oil Co. 2.
Bane, Miller & Co. 1.
Phillips, Sutton & Co. 1.
Rigs, 10; well drilling, 33; total, 43.

**SOUTHEAST OHIO**
**Wells Completed**

**Monroe County—**
Nuceck, Weber & Co. 3 . . . . . 3
**Perry County—**
Householder, Griggs & Co. 1 . . . . . 5
Householder, Planet Oil Co. 6 . . . . . 25
Brown, Pure Oil Co. 1 . . . . . gas
**Hocking County—**
Noble, Gordon Oil Co. 4 . . . . . 10
Marks, Preston Oil Co. 3 . . . . . 95
Leslie, Pure Oil Co. 3 . . . . . 40
H. V. P. Co. Charters Oil Co. 203 . . . . . 75
N. Y. C. Co., N. Y. C. C. 8 . . . . . 25
Hass, Ohio F. S. Co. 1 . . . . . 130
Harden, Ohio F. S. Co. 3 . . . . . 55
**Guernsey County—**
Mahaffey, Ohio F. G. Co. 2 . . . . . gas
Jenkins, Ohio F. & G. Co. 1 . . . . . dry
Fulton, Ohio F. & G. Co. 2 . . . . . 225
McKee, Ohio F. & G. Co. 1 . . . . . gas
Udell, Pure Oil Co. 1 . . . . . gas
Grim, Logan Gas Co. 1 . . . . . gas
Booth, Logan Gas Co. 1 . . . . . gas
White & Co. Leonard O. & G. Co. 3 . . . . . gas
Slavic, Smith & Co. 1 . . . . . 50
Knight, Pollock O. & G. Co. 1 . . . . . gas
Speer & Co., Ohio Oil Co. 3 . . . . . gas
Gibson, Ohio Oil Co. 1 . . . . . gas
Taylor heirs, Miller & Moore 2 . . . . . 280
Morrison, Wittmer Prod. trustee 4 . . . . . gas
Brill, Cambridge Gas Co. 2 . . . . . gas
Lake, Hunter & Co. 2 . . . . . gas
Fulton, Ohio F. S. Co. 2 . . . . . 290
Dedicks, Wittmer Co. trustee 2 . . . . . 50
McFadden, Harold Pasco 1 . . . . . 20
**Licking County—**
Frampton, Myers & Co. 1 . . . . . 75
Hoskinson, Colgan Drilling Co. 1 . . . . . 45
Noland, S. C. Brown 4 . . . . . 25
Baughman, S. E. Brown 2 . . . . . 30
Myers heirs, Leonard O. & G. Co. 10 . . . . . 20
Myers heirs, Leonard O. & G. Co. 11 . . . . . 25
Chaney, Shaffer & Co. 8 . . . . . 10
McKinney, North Fork Oil Co. 35 . . . . . 3
McKinney, North Fork Oil Co. 36 . . . . . 3
McKinney, North Fork Oil Co. 37 . . . . . 3
Gutridge, Bishop & Co. 7 . . . . . 4
Petty, Wehrle & Co. 8 . . . . . 1
O'Bannon, Hope C. & R. Co. 1 . . . . . 10
Wilhelm, E. H. Everett Co. 3 . . . . . 200
Michael, Hope C. & R. Co. 1 . . . . . 4
A. O. Michael, Pure Oil Co. 5 . . . . . 30
Willard, E. H. Everett Co. 1 . . . . . 5
Little heirs, Brown & Co. 3 . . . . . 5
**Coshocton County—**
Wantland, Preston Oil Co. 1 . . . . . 75
**Muskingum County—**
Fisher, Swingle O. & G. Co. 1 . . . . . gas
Stoneburner, Daily O. & G. Co. 1 . . . . . gas
**Knox County—**
Dugan, Ark. F. O. Co. 21 . . . . . 5
Beatty, Ohio F. S. Co. 1 . . . . . 60
**Noble County—**
Blackburn, Young & Co. 1 . . . . . 2
**Athens County—**
Phillips, Wehrle & Co. 1 . . . . . 1
Lash, Richland O. & G. Co. 3 . . . . . 4
**Vinton County—**
Walburn, Bode & Co. 1 . . . . . 3
Queen, T. & W. Oil Co. 3 . . . . . 2
**Morgan County—**
Swytzer, Swingle O. & G. Co. 1 . . . . . gas
Dale, Smith & Co. 235 . . . . . dry
Dale, Smith & Co. 236 . . . . . 1
**Meigs County—**
Deer, Pure Oil Co. 1 . . . . . gas
Singer, Pure Oil Co. 1 . . . . . dry
Easterday, Ohio F. S. Co. 2 . . . . . 10
**Washington County—**
Mendenhall, Buchanna & Wise 36 . . . . . 2
Morris, Morris Oil Co. 2 . . . . . dry
Berg, Mendenhall & Co. 39 . . . . . 1
**Jefferson County—**
Winn, Hennegnan & Hanlon 5 . . . . . 2
Kelly & Co. Crawford & Co. 1 . . . . . 2
**Belmont County—**
Bumgardner, N. G. Co. of W. Va. 5 . . . . . 8

Wells completed . . . . . 70
Production . . . . . 1308
Dry . . . . . 4
Gas . . . . . 17

**MONROE COUNTY**
**Wells Drilling**

Langsdorf, J. Langsdorf 1.
Dillon, Gold Crown O. & G. Co. 3.

**PERRY COUNTY**
**Rig**

Bennett, Cline & Co. 1.
**Wells Drilling**
Barnes, Hope C. & R. Co. 1.
Ream, Hope C. & R. Co. 1.
S. Barnes, Hillard & Co. 2.
Sunday C'k C. Co. Sunday C'k C. Co. 141.
McCune, Hope C. & R. Co. 1.
Milligan, Larmer & Schull 1.
Kelly heirs, Pure Oil Co. 1.

**HOCKING COUNTY**
**Rigs**

Thrush, Gordon Oil Co. 5.
Tucker, Griffin Prod. Co. 1.
Laslie, Pure Oil Co. 4.
**Wells Drilling**
Thrush, Gordon Oil Co. 4.
Kitchner, Gordon Oil Co. 3.
Ruble, Linton & Co. 1.
L. R. C. & C. Co. Glendale Oil Co. 1
Dicken, Sure Shot O. & G. Co. 1
Mowery, Griffin Prod Co. 3.
Linton, Preston Oil Co. 3.
Price, Preston Oil Co. 8.
Pemmell, Cohen & Co. 1.

**HOLMES COUNTY**
**Rigs**

Nethrew, Empire G. & F. Co. 2
Schuler, Burtner & Morgan 2.
Conn, Kemrow Co. 2.
Kendall, Pure Oil Co. 3.
Snyder, Pure Oil Co. 3.
**Wells Drilling**
Middaugh, East Ohio Gas Co. 2.
Garver, East Ohio Gas Co. 1.
Mohler, Kemrow Co. 1.
Fites, Kemrow Co. 1.
Steele, Empire G. & F. Co. 1.
Schuler, Bartner & Co. 2.
Miller, East Ohio Gas Co. 3.
Noels, East Ohio Gas Co. 1.

**GUERNSEY COUNTY**
**Rigs**

Owens, Ohio Fuel Gas Co. 1.
Kennedy, Ohio Fuel Gas Co. 1.
Wrick, Ohio Fuel Gas Co. 1.
Mitchell, Ohio Fuel Gas Co. 1.
Cambridge, Ohio Fuel Gas Co. 1
Donley, Ohio Fuel Gas Co. 2.
Cleland, Ohio Fuel Gas Co. 1.
Rogers, Ohio Fuel Gas Co. 2.
Armstrong, Ohio Fuel Gas Co. 1.
Black, Ohio Fuel Gas Co. 1.
Hall, Ohio F. S. Co. 2.
Fulton, Ohio F. S. Co. 2.
J. R. Fulton, Ohio F. S. Co. 3, 4, 5, 6.
M. H. Fulton, Ohio F. S. Co. 1.
Wycaff, Ohio F. S. Co. 2.
White & Co. Pure Oil Co. 1.
Ruby, Eastern Carbon B. Co. 1.
McCullough, Eastern Carbon B. Co. 1.
Booth, Logan Gas Co. 2.
Williamson, Eastern Carbon B. Co. 1.
Slacio, Smith & Co. 3.
Unity School lot, Scott & Co. 1.
Wayne Mining Co. Detroit Edison Co. 2.
Gardner, Jr. Wittmer Co. trustee 1.
**Wells Drilling**
Johnson, Ohio Fuel Gas Co. 1.
Smeltzer, Ohio F. & S. Co. 1.
Fulton, Ohio F. S. Co. 1, 3, 4.
Burris, Ohio F. S. Co. 1.
Galloway, Ohio F. S. Co. 1.
Lake, Ohio F. S. Co. 1.
Fulton, Ohio F. S. Co. 1.
Abrams, Ohio F. S. Co. 1.
Farra heirs, Pure Oil Co. 1, 2.
Chapman, Pure Oil Co. 1.
Ringer & Co. Pure Oil Co. 2.
Gilman & Co. Pure Oil Co. 1.
Miller, Pure Oil Co. 1.
Young, Pure Oil Co. 2.
Gugenheim, Pure Oil Co. 1.
Vessels, Eastern Carbon B. Co. 1.
Glenn, Eastern Carbon B. Co. 1.
Wycaff & Co Eastern Carbon B. Co. 1.
Barnett, Leonard O. & G. Co. 1.
Martin, Leonard O. & G. Co. 1.
Evers, Jewell & Co. 2.
Vincent, Jewell & Co. 1.
Slovic, Smith & Co. 2.
Unterzumber, Cambridge O. & G. Co. 4.
Knight, Big Lime O. & G. Co. 4.
Archer & Co. S. McConkey 2.
Shaw, Ohio Oil Co. 1.
Taylor, Ohio Oil Co. 1.
Hands & Co. Ohio Oil Co. 1.
McKelvey, Kemrow Co. 3.
Tedricks, Gombert O. & G. Co. 2.
Robinson, Linkhorn & Co. 1.
Gillespie, Mc. & B. 2.
Dedrick & Co. Wiser O. & G. Co. 1.
Geese, Keith Bros. 1.
Blackburn, Blackburn & Co. 1.
Stackhouse, Ferguson & Co. 1.

**LICKING COUNTY**
**Rig**

Galt, Meade & Co. 1.
**Wells Drilling**
McKinney, North Fork O. Co. 38.
Stone, Ohio F. S. Co. 2.
Brooks, Ohio F. S. Co. 2.
Carson, Carson & Co. 4.
Dustheimer, Smith & Co. 3.
Ewers, Wehrle & Co. 9.
McKee, E. H. Everett Co. 1.
Ensworthy, Pure Oil Co. 1.
Rinehart, Margaret Oil Co. 1.

**MUSKINGUM COUNTY**
**Rig**

Garrier, McCurdy & Co. 1.
**Wells Drilling**
Riskey, McCurdy & Co. 1.
Gibbon, McCurdy & Co. 1.

**KNOX COUNTY**
**Wells Drilling**

McMahan, Ohio F. S. Co. 2.
Kouse heirs, Reno Oil Co. 3.
Humphrey, East Ohio Gas Co. 1.
Sapp, Upham Gas Co. 1.
Hall, Ark. Fuel Oil Co. 4.

**NOBLE COUNTY**
**Wells Drilling**

Shafer, Wickens & Co. 1.
Merry, Yerain & Co. 8.
Harding, Ohio F. S. Co. 1.
Way, W. N. Co. O. & G. Co. 1.
Mallett, Smith & Co. 1.

**ATHENS COUNTY**

Thomas, Clouster O. & G. Co. 1.
Fagan, Weherle & Co. 1.
Gift, Cook & Co. 1.

**MORGAN COUNTY**
**Well Drilling**

Riecker, Keller & Co. 1.

**MEIGS COUNTY**
**Rigs**

Rasp, Ohio F. S. Co. 1.
Brewer, H. B. Goddard 1.
Hysell, Dailey O. & G. Co. 1.
**Wells Drilling**
Salser, Pure Oil Co. 2.
Paulin, Pure Oil Co. 2.

**WASHINGTON COUNTY**
**Rig**

Thurman, Citizens Bank 6.
**Wells Drilling**
Henselman, Laudeback Oil Co. 1.
Allison, Thos. Keating 6.
Hesselop, Erb & Co. 1.
Roat, Roat & Co. 3.
Gitchell heirs, Henderson Oil Co. 5.
Williams, Carner & Co. 2, 4.
Palmer, Weir & Co. 1.
Hupp, Jerry Buckley 1.

**BELMONT COUNTY**
**Well Drilling**

Durig, N. G. Co. of W. Va. 2.

**CARROLL COUNTY**
**Wells Drilling**

Harrington, N. G. Co. of W. Va. 2
Dorance heirs, Brown & Co. 1.
Harding, Eaton & Co. 4.

**HARRISON COUNTY**
**Wells Drilling**

Collins, Wayne Oil Co. 6.
Smith, Quinn & Co. 5.

**JEFFERSON COUNTY**

Kellerman, Turner & Co. 8.
Rigs, 41; wells drilling, 101; total, 142.

**WEST VIRGINIA**
**Wells Completed**

**Marion County—**
Rice, Owens R. & M. Co. 1 . . . . . gas
Michael, Carnegie Gas Co. 1 . . . . . dry
Barrickman, Bell O. & G. Co. 1 . . . . . gas
**Monongalia County—**
Eddy, Dunn-Mar O. & G. 6 . . . . . 3
Wright, Swatika O. & G. Co. 1 . . . . . gas
**Wetzel and Tyler Counties—**
Riter, Hope C. & R. Co. 7 . . . . . 5
Ferrell heirs, Phila. Oil Co. 1 . . . . . 40
Keller, Mfrs. L. & H. Co. 7 . . . . . 3
Oliver, Mfrs. L. & H. Co. 1 . . . . . 2
Gale heirs, Samuel & Gale 14 . . . . . 5
Church Lot, Sutton Bros. 1 . . . . . gas
Renner heirs, Mfrs. L. & H. Co. 4 . . . . . gas
Teagarden, Carnegie Gas Co. 3 . . . . . gas
**Marshall County—**
Williams, Mfrs. L. & H. Co. 2 . . . . . gas
Jones, Mfrs. L. & H. Co. 2 . . . . . gas
Howard, Mfrs. L. & H. Co. 3 . . . . . gas
Geho, Hope C. & R. Co. 1 . . . . . dry
Howard hrs. Patterson & Co. 4 . . . . . gas
**Doddridge County—**
Polen, Col. Carbon Co. 3 . . . . . gas
Davis, Local Parties 1 . . . . . gas
Polan, J. E. Trainer 1 . . . . . dry
Ross, Trainer & Travis 1 . . . . . 2
Coleman, Murphy Oil Co. 2 . . . . . gas
**Ritchie County—**
Brake, Carnegie Gas Co. 1 . . . . . gas
Smarr, Carnegie Gas Co. 1 . . . . . gas
Britton, Pgh. & W. Va. G. Co. 1 . . . . . gas
Hogue, Ritchie Gas Co. 1 . . . . . gas
Farley, Phila. Oil Co. 2 . . . . . gas
Miller heirs, Hope Gas Co. 1 . . . . . gas
Richard, S. W. Young 1 . . . . . 132
**Gilmer County—**
Cabot, Hope Gas Co. 1 . . . . . gas
Stamp, Cartiers Oil Co. 2 . . . . . dry
Snodgrass, Hope Gas Co. 1 . . . . . dry
Moody heirs, Carnegie Gas Co. 1 . . . . . dry
**Wirt County—**
Rathbone Tract, Roberts Bros. 151 . . . . . 1
**Braxton County—**
Engle, Engle Bros. 1 . . . . . gas
Brown, Ohio Fuel Oil Co. 1 . . . . . dry
**Wood County—**
Grant, So. P. O. Co. 21 . . . . . dry
Ingram, Ingram Farm Oil Co. 1 . . . . . dry
**Pleasants County—**
Steel, Rexroad & Davis 1 . . . . . gas
Rinard, Dotson & Co. 1 . . . . . gas
Adams, Howard Hall & Co. 1 . . . . . dry
**Roane County—**
Conley, Heck Oil Co. 7 . . . . . 5
Conley, Heck Oil Co. 8 . . . . . 5
Perot, G. L. Cabot, 1 . . . . . gas
**Calhoun County—**
Sickels, Hope C. & R. Co. 1 . . . . . gas
Law, Rope C. & R. Co. 1 . . . . . gas
Lynch, Euclid O. & G. Co. 1 . . . . . 10
Leach, G. L. Cabot 1 . . . . . 2
Stump, Hope Gas Co. 2 . . . . . gas
Bourne, Hope C. & R. Co. 3 . . . . . gas
Force, Kingsbury & Dallman 2 . . . . . gas
Norris heirs, Britton Bros. 3 . . . . . gas
**Lincoln County—**
McDonald, Wysong & Co. 1 . . . . . gas
H. C. L. & M. Co. U. F. G. Co. 1 . . . . . gas
H. C. L. & M. Co. U. F. G. Co. 1 . . . . . gas
Elkins, Cambridge Gas Co. 1 . . . . . gas
**Kanawha County—**
Littlepage-Gardner, U. F. G. Co. 1 . . . . . gas
Littlepage-Gardner, U. F. G. Co. 2 . . . . . gas
**Boone County—**
Goshorn heirs, Walker Oil Co. 59 . . . . . 2
Chambers, Owens B. & M. Co. 2 . . . . . gas
**Cabell County—**
Thornberg, Aetna O. & G. Co. 1 . . . . . gas
Morris, Harshbarger O. & G. Co. 1 . . . . . gas
**Mingo County—**
Logan C. C. Co., Old Colony O. & G. 23. 10
Red Jacket, & C. Redjacket C. & C. 2 gas
**Wayne County—**
Dameron, Chartiers Oil Co. 1 . . . . . 3

Wells completed . . . . . 65
Production . . . . . 230
Dry . . . . . 11
Gas . . . . . 40

**LEWIS COUNTY**
**Rig**

Parsonage lot, Frey & Co. 1.

**UPSHUR COUNTY**
**Well Drilling**

Hammer, French Creek O. & G. Co. 1.

**HARRISON COUNTY**
**Wells Drilling**

Martin, Hope C. & R. Co. 1.
Sullivan, Hope C. & R. Co. 1.

**MARION COUNTY**
**Wells Drilling**

Billingsby, Hope Gas Co. 1.
Tennant, Hope Gas Co. 1.
Straight, Owens B. & M. Co. 1.
Arnett, C. L. Morris 1.
Hibbs, Carnegie Gas Co. 5.
Furbee, Hope Gas Co. 3.
Metz, S. N. Elliott 2.
M. Tennant, Sec. P. O. Co. 2

**MONONGALIA COUNTY**
**Rig**

Whistler, Maxon Oil Co. 3.
**Wells Drilling**
Yost, Mfrs. L. & H. Co. 2.
Delaney heirs, Mfrs. L. & H. Co. 2
Tennant, Tennant O. & G. Co. 1
White, Randall Gas Co. 1.
Core, Phila. Oil Co. 1.
Dawson heirs, D. W. Null 1.
Liming, Bell Bros. 1.

**WETZEL AND TYLER COUNTIES**
**Rigs**

Wade, Carnegie Gas Co. 1.
Burley, Johns Gas Co. 1.
Campbell, Denver O. & G. Co. 1.
Riter, Rope C. & R. Co.
Longstreth, Mfrs. L. & H. Co. 1.
Eddy, McIntyre Bros. 1.
Kyle heirs, J. H. Pentz 1.
Hennan, Cameron O. & G. Trust 1.
**Wells Drilling**
Riter, Hope C. & R. Co. 1.
Cramblett, Wiser Oil Co. 1.
McIntyre, Athy O. & G. Co. 3.
Morgan, Carr Bros. 1.
Burley, Silver Hill O. Co. 3.
Mills, Richwood Oil Co. 14.
Price, Shimwell Co. 1.
Himelrick, Mfrs. L. & H. Co. 1.
Johnston, Mfrs. L. & H. Co. 1.
Cornell, Amer. O. D. Co. 4.
W. Johnston, J. B. Orndoff 1.
Milliken heirs, J. B. Orndoff 4
Phillips, Walter Null 2.
Smith, Hope Gas Co. 1.
Williamson, Knowlton & Co. 1.
Yocum, Myers O. & G. Co. 1.

**MARSHALL COUNTY**
**Rigs**

Jochum, Spider O. & G. Co. 1.
Campbell heirs, Decem Dev. Co. 5.
Howard, Mfrs. L. & H. Co. 3.
Pyles, Mfrs. L. & H. Co. 2.
Marple, Mfrs. L. & H. Co. 2.
**Wells Drilling**
Newman, Wood & Co. 1.
Reid, Mfrs. L. & H. Co. 2.
Howard heirs, Mfrs. L. & H. Co. 3.
Evans, Mfrs. L. & H. Co. 1.

**HANCOCK COUNTY**
**Rig**

Crazo heirs, John McIntosh 1.
**Well Drilling**
Thorn, F. L. Freshwater 6.

**DODDRIDGE COUNTY**
**Wells Drilling**

Ford, Buckeye Oil Co. 1.
Stuttler, W. D. Gribble 1.
Fletcher, So. P. O. Co. 1, 5.
Maxwell, J. E. Trainer 2.
Chevrant, Mfrs. L. & H. Co., 1.
Robinson, G. B. Trainer 1.
Ahouse, Mfrs. L. & H. Co. 1.

**RITCHIE COUNTY**
**Rigs**

Haught, Haught & Co. 1.
Ryan, Southern Oil Co. 8.
W. Va. Tract, Whitwood Oil Co. 29.
Swisher, Deem & Co. 3.
McGregor heirs, Cochran & Hays 2.
Mason, Mason Farm Oil Co. 3.
**Wells Drilling**
Snodgrass, Hope Gas Co. 3.
Prather, Wright Oil Co. 2.
Bush, Ohio Fuel O. Co. 4.
Reed, Carnegie Gas Co. 2.
Allman, Hope C. & R. Co. 2.
Britton, Pgh. & W. Va. G. Co. 2.
Snyder, S. O. Young 1.
McCosh heirs, Williams & Co. 1.
W. Va. Tract, R. G. Wiles 6.
Lewis, So. P. O. Co. 2.
Hickman heirs, Junior Oil Co. 1.
Ingram, Rinehart & Co. 1.
J. Ingram, Rinehart & Co. 1.
Bradford, Rico O. & G. Co., 2.
Parker, Morgan & Co. 1.
Flesher, Little Flower Oil Co. 1.
Wilson, So. P. O. Co. 8.
Mullenax, Reno Oil Co. 3.
Nutter, Hays & Co. 1.
Lewis, Hope C. & R. Co. 1.
Grandlier, Snyder & Co. 1.
Miller heirs, Unknown 1.

**GILMER COUNTY**
**Wells Drilling**

Bell, Roberts & Co. 1.
**Rig**
Tierney, Tierney & Co. 3.

**BRAXTON COUNTY**
**Wells Drilling**

McCummers, Pgh. & W. Va. G. Co. 1.
Rollyson, Pgh. & W. Va. G. Co. 1.
Hall, Ohio Fuel Gas Co. 1.
Wade, Ohio Fuel Gas Co. 1.

**WOOD COUNTY**
**Rigs**

Roberts heirs, Hope C. & R. Co. 1.
Pope, E. E. Pope 2.
**Wells Drilling**
Reed, Reed Bros. 2.
Compton, Mallory & Ekas 3.
Kirch, Richard Oil Co. 1.
Pope, E. E. Pope 3.
Vaughn, S. L. Anderson 1.
Upton, T. Connelly 1.

**PLEASANTS COUNTY**
**Rig**

Dennis, White & Co. 1.
**Wells Drilling**
Hammett heirs, Faith O. & G. Co. 5.
Phelps, Phelps Farm Oil Co. 1.
McTaggart, Hammett & Co. 1.
Templeton, Ambler Oil Co. 3.

**ROANE COUNTY**
**Rig**

Runnion, G. L. Cabot 1.
**Wells Drilling**
Mevey, Heck Oil Co. 1.
Curry, Hamilton Oil Co. 1.

**CALHOUN COUNTY**
**Rig**

Stuttler, G. L. Cabot 1.
Dewees, Hope C. & R. Co. 2.
**Wells Drilling**
Newman, Federal O. & G. Co. 36.
Barr, L. B. Carroll 3.
Cain, Thos Crowley 1.
Knight, Hope C. & R. Co. 1.
Parsons, Hope C. & R. Co. 2.
Francis-Gainer, White Pine O. Co. 1.
Ayers, White Pine O. Co. 1.
Gainer, U. F. G. Co. 1.
Kelley, McIntosh & Scott 1.
M. E. Kelley, Lewis & Co. 1.

**LINCOLN COUNTY**
**Rigs**

Linville, Hope Gas Co. 1.
Sweetland, Col. G. & E. Co. 1.
Alderson, E. C. Cameron 5, 6, 7.
**Wells Drilling**
Lincus, Sweetland & Co. q.
Sweetland, Col. G. & E. Co. p.
Carnes, Cambridge Gas Co. 1.

**PUTNAM COUNTY**
**Well Drilling**

Sird, So. P. O. Co. 1.

**LOGAN COUNTY**
**Well Drilling**

Yawke-Freeman, So. P. O. Co. 24.

**KANAWHA COUNTY**
**Rig**

White, Snyder & Co. 1.
**Wells Drilling**
Pauleu, Ohio Fuel O. Co. 2.
Kennedy heirs, United Carbon Co. 7.
Brown, Virginian G. & O. Co. 17.

**BOONE COUNTY**
**Wells Drilling**

Williams Coal Co. Pure Oil Co. 229, 230, 231.

Federal Coal Co. Pure Oil Co. 8, 14, 15, 17.
L. R. & P. Tract, Pure Oil Co. 16, 28.
Cassingham, Owens B. & M. Co. 13.
Bedford, Owens B. & M. Co. 12.

**CLAY COUNTY**
**Rigs**
Stockly, So. P. O. Co. 52.
Parker, So. P. O. Co. 6.
Brown & Co. Virginian G. & O. Co. 1, 2.
M. L. Brown, Virginian G. & O. 1, 2.
Lockhart tract, Virginian G. & O. Co. 8.
**Wells Drilling**
Parker, So. P. O. Co. 5.
Reed, Ohio Fuel Oil Co. 4.
Brown & Co. Virginian G. & O. Co. 19.
Brown & Co., Virginian G. & O. Co. 5.
Lockhart tract, Virginian G. & O. Co. 7.
Hively School lot, Stephenson Oil Co. 1.
Smith heirs, Elkins O. & G. Co. 1.
Slayer, Elkins O. & G. Co. 1.
White, King O & G. Co. 1.
Koontz & Co. Ohio Fuel Oil Co. 2.
Samples, Empire Pet. Co. 4.
Anderson, Empire Pet. Co. 2.
Coal River M. Co. Empire Pet. Co. 32.
Horse C'k C. & L. Co. United Fuel Gas Co. 1.
Horse C'k C. & L. Co. United Fuel Gas Co. 2.
Arbogast, G. L. Cabot 2.

**CABELL COUNTY**
**Rig**
Nicols, Monickel O. & G. Co. 1.
**Wells Drilling**
Martin, Midway City Gas Co. 1.

**MINGO COUNTY**
**Wells Drilling**
Logan C. Co. Old Colony O. & G. Co. 24.
Closterman, Old Colony O. & G. Co. 13.

**WAYNE COUNTY**
**Well Drilling**
Colwell, Old Colony O. & G. Co. 2.
Rigs, 45; wells drilling, 135; total, 180.

## LIMA FIELDS

**Summary of Field Operations**

| | Com. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Wood | 4 | 7 | 1 | 0 | 1 | 6 | 7 |
| Hancock | 2 | 25 | 0 | 0 | 0 | 3 | 3 |
| Allen | 1 | 2 | 0 | 0 | 0 | 1 | 1 |
| Auglaize | 1 | 1 | 0 | 0 | 0 | 2 | 2 |
| Sandusky | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Mercer | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Seneca | 2 | 11 | 0 | 0 | 0 | 2 | 2 |
| Van Wert | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Lucas | 1 | 22 | 0 | 0 | 0 | 3 | 3 |
| Ottawa | 5 | 60 | 0 | 0 | 0 | 3 | 3 |
| Shelby | 3 | 39 | 0 | 0 | 0 | 1 | 1 |
| Hardin | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Darke | 0 | 0 | 0 | 0 | 0 | 3 | 3 |
| Paulding | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Total Feb. | 19 | 167 | 1 | 0 | 3 | 30 | 33 |
| Total Jan. | 23 | 218 | 2 | 1 | 8 | 31 | 39 |
| Difference | 4 | 51 | 1 | 1 | 5 | 1 | 6 |

**WELLS COMPLETED**
**WOOD COUNTY**
Montgomery—H. O. Carsten, Hollis O. Carsten 1, 2, 3, 4 ..... abd
Liberty—Frank Stratton, Man Stockwell 6 ..... 2
John Mercer, Mercer & Ray 25 ..... 2
Henry—Mays & Bushey, Mays & Bushey 1 ..... 3
Webster—Chas. Gelden, John Gelden & Co. 5 ..... dry

Wells completed ..... 4
Production ..... 7
Dry ..... 1
Abandoned ..... 4

**HANCOCK COUNTY**
Liberty—M. E. Discus, Kirk & Discus 3 ..... 5
Eagle—Henry Deeds, B. Porter & Co. 19 ..... 20

Wells completed ..... 2
Production ..... 25

**ALLEN COUNTY**
Spencer—Henry Metzger, Metzger Bros. 2 ..... 2

**AUGLAIZE COUNTY**
St. Mary's—W. G. Kishler, Ohio Oil 32 ..... 1

**SANDUSKY COUNTY**
Jackson, Mary J. Walby, Klotz Oil 7.. abd
O. D. Dibert, Hurry Up Oil 3 ..... abd

Abandoned ..... 2

**SENECA COUNTY**
Jackson—Mary E. Steinbrook, Onsel Bros. 6 ..... 10
I. Waltermier, Irvin Waltermier 1 .. 1
Mary E. Long, J. F. Arnold 10 ..... a d

Wells completed ..... 2
Production ..... 11
Abandoned ..... 1

**LUCAS COUNTY**
Oregon—Gertrude J. Niles, Ohio Oil 47.. 22

**OTTAWA COUNTY**
Harris—Geo. Manahan, Haubert & Hummell 4 ..... 3
Frank H. Dischinger, Onsel Bros. & Co. 7 ..... 11
John H. Myers, Ohio Oil 12 ..... 12
Frederick E. Nellis, Sugar Creek Oil 3 26
Catawba—Catawba Orchards, Catawba O. & G. 1 ..... 8

Wells completed ..... 5
Production ..... 60

**SHELBY COUNTY**
Cynthian—B. Danzig, Slagel & Johnson 7 ..... 7
F. M. Turner, Lee A. Watson 2 .... 25
McLean—John Sherman, Ft. Laramie Oil & Gas 1 ..... 7

Wells completed ..... 3
Production ..... 39

**WOOD COUNTY**
**Rig**
Liberty—Eli Stockwell, Mattie S. Rouse & Co. 23.
**Wells Drilling**
Bloom—R. A. Hughes, Helena L. Hughes 6.
Liberty—Orpha J. Walden, Walden & Evans 2.
Perrysburg—Alexander Beard, O. K. O. Oil & Gas 7.
H. A. L. Lindenmeier, O. K. O. Oil & Gas 9.
Troy—J. F. Harr, G. H. Blausey 6.
Webster—Chas. Geldin, John Geldin & Co. 6.
Rigs, 1; wells drilling, 6; total, 7.

**HANCOCK COUNTY**
**Wells Drilling**
Marion—Geo. Snyder, George Snyder 1.
Eagle—Henry Deeds, B. Porter & Co. 20.
Portage—Isaac Hart, Mathias Bros. 12.
Wells drilling, 3.

**ALLEN COUNTY**
**Well Drilling**
Bath—P. D. Driver, O. T. Botkins & Co. 6.

**AUGLAIZE COUNTY**
**Wells Drilling**
Moulton—J. H. Harshbarger, H. F. Kelly & Co. 3 ..... 3
Noble—M. Weeder, J. F. Fee 1.
Wells drilling, 2.

**SANDUSKY COUNTY**
**Wells Drilling**
Woodville—W. H. Bruns, Ohio Oil 1.
Louis Hille, Louis Hille 4.
Washington—J. H. Myers, Ohio Oil 9.
Wells drilling, 3.

**MERCER COUNTY**
**Well Drilling**
Hopewell—M. Hellworth, June Oil 1.

**SENECA COUNTY**
**Wells Drilling**
Hopson—Mary E. Steinbrook, Onsel Bros. 7.
Eden—Frank Funk, Great No. Oil 1.
Wells drilling, 2.

**VAN WERT COUNTY**
**Well Drilling**
Liberty—John Chilcote, Chilcote Oil & Gas 3.

**LUCAS COUNTY**
**Wells Drilling**
Oregon—R. A. Bartley, Fred Keister 10.
Waterville—H. C. King, Waterville Gas & Oil 1.
Monclova—W. F. Black, L. W. Vermilye Rec. 2.
Wells drilling, 3.

**OTTAWA COUNTY**
**Wells Drilling**
Harris—Frank H. Dischinger, Onsel Bros. & Co. 8.
Gust Magsig, Burman Oil 23.
Salem—August Vogel, Oak Harbor Natural Gas 1.
Wells drilling, 3.

**SHELBY COUNTY**
**Well Drilling**
Laramie—J. H. Borhorst, Lee A. Watson 2.

**HARDIN COUNTY**
**Well Drilling**
McDonel—Earl Hites, H. E. Schmidt 4.

**DARKE COUNTY**
**Wells Drilling**
Mississinewa—John E. Schmetz, Illindo Oil 6.
S. V. Ainsworth, R. D. Hance 1.
Allen—G. L. Toman, Hance & Hoffman 5.
Wells drilling, 3.

**PAULDING COUNTY**
**Rigs**
Harrison—C. Springer, John T. Schunck 5.
A. M. Bailey, U. S. A. Oil 6.
Rigs, 2.

## CENTRAL OHIO

**Summary of Field Operations**

| | Com. | Prod. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Knox | 1 | 60 | 0 | 0 | 2 | 4 | 6 |
| Ashland | 2 | 0 | 0 | 2 | 3 | 2 | 5 |
| Medina | 3 | 16 | 1 | 0 | 0 | 5 | 5 |
| Lorain | 1 | 0 | 0 | 1 | 1 | 1 | 2 |
| Wayne | 0 | 0 | 0 | 0 | 2 | 5 | 7 |
| Holmes | 12 | 245 | 3 | 5 | 2 | 18 | 20 |
| Athens | 5 | 0 | 2 | 3 | 0 | 8 | 8 |
| Coshocton | 4 | 80 | 0 | 3 | 0 | 4 | 4 |
| Cuyahoga | 6 | 0 | 1 | 5 | 3 | 12 | 15 |
| Jackson | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Summitt | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Total Feb. | 34 | 401 | 7 | 19 | 13 | 61 | 74 |
| Total Jan. | 36 | 132 | 10 | 23 | 11 | 69 | 80 |
| Difference | 2 | 269 | 3 | 4 | 2 | 8 | 6 |

**WELLS COMPLETED**
**KNOX COUNTY**
Butler—A. J. Beatty, Ohio Fuel Gas 1.. 60
**ASHLAND COUNTY**
Sullivan—S. Sponsler, Kemrow Oil 3.... gas
Troy—Ray Arnold, Duffenmyer & Co. 2 ..... gas

Wells completed ..... 2
Gas ..... 2

**MEDINA COUNTY**
Litchfield, L. A. Severcool Ohio Fuel Supply 1 ..... 1
Granger—Nancy L. Sylvester, Empire Gas & Fuel 1 ..... 15
Chatham—Wm. P. Wertz, E. R. Edson Co. 1 ..... dry

Wells completed ..... 3
Oil wells ..... 2
Production, oil ..... 16
Dry ..... 1

**LORAIN COUNTY**
Columbia—J. & S. Prindle, Ohio Fuel Gas 1 ..... gas

**HOLMES COUNTY**
Monroe—Thos. S. Doty, E. Ohio Gas 1.. dry
Velentine Close, Ohio Fuel Gas 1 .... gas
Hardy—J. E. Miller, E. Ohio Gas 2.... 70
Sam Franks, E. Ohio Gas 2 ..... 85
Virginia Tidball, Kemrow Co. 1 ..... 40
Geo. Schuler, Burton & Morgan 1.... 50
Elizabeth Steele, Empire G. & F. 2.. dry
Kilbuck—Byron A. Middaugh 19, E. Ohio Gas 2 ..... dry
A. E. Patterson, E. Ohio Gas 1..... gas
C. P. Allison, Ohio Fuel Gas 2..... gas
Wm. Sandles, Kemrow Co. 1 ..... gas
Sarah Middaugh, Leonard O. & G. 1.. gas

Wells completed ..... 12
Oil wells ..... 4
Production, oil ..... 245
Dry ..... 3
Gas ..... 5

**ATHENS COUNTY**
Carthage—J. L. Varner, Fairfield Gas 1, 2 ..... gas
Dan Ackerly, Athens Gas 3 ..... dry
Isaac Pierce, Logan Gas 2 ..... dry
Florence Mooney, Logan Gas 1..... gas
Wells completed ..... 5
Dry ..... 2
Gas ..... 3

**COSHOCTON COUNTY**
Perry—L. L. Wantland, Logan Gas 1 .. 80
Monroe—Peter Lepley, Empire G. & F. 1 gas
Robt. J. McKelvey, Empire G. & F.. 2 gas
M. J. Nyhart, E. Ohio Gas 1 ..... gas

Wells completed ..... 4
Oil wells ..... 1
Production, oil ..... 80
Gas ..... 3

**CUYHOGA COUNTY**
Dover—A. Dunford, Preston Oil 1 .... gas
G. Dunford, J. W. Cushing 2 ..... gas
P. F. Decker, Dempsey Bros. 1 ..... gas
F. B. Harrison, Arthur & Simpson 1.. gas
F. B. Harrison, Arthur & Simpson 2.. dry
Kinlow, Arthur & Simpson 1 ..... gas

Wells completed ..... 6
Dry ..... 1
Gas ..... 5

**KNOX COUNTY**
**Rigs**
Jefferson—C. F. & L. N. Stout, East Ohio Gas 1.
Brown—Phil Bross, Upham Gas 3.
**Wells Drilling**
Jefferson—James Temple, East Ohio Gas 1.
Thos. McMahon, Ohio Fuel Gas 2.
Geo. W. Sapp, Upham Gas 1.
Clay—B. F. Baird, Logan Gas 7.
Rigs, 2; wells drilling, 4; total, 6.

**ASHLAND COUNTY**
**Rigs**
Orange—D. A. & L. R. Shiveley, Logan Gas 1.
Sullivan—W. J. Harvinott, Logan Gas 1.
D. E. Spencer, Ohio Fuel Gas 1.
**Wells Drilling**
Hanover—J. H. Miller, East Ohio Gas 3.
Cedar Creek—Ray Shaw, Ringler & Co. 1.
Rigs, 3; wells drilling, 2; total, 5.

**MEDINA COUNTY**
**Wells Drilling**
Lafayette—Derhammer & Dorr, Ohio Fuel Gas 1.
Chas. R. Puchhas, Empire G. & F. 2.
Atlas J. House, Daugherty Bros. 2.
Liverpool—Dm. A. Law, Chem. O. & G. 1.
Medina—C. L. White, Empire G. & F. 1.
Wells drilling, 5.

**LORAIN COUNTY**
**Rig**
Eaton—H. M. Howard, Wiser Oil 1.
**Well Drilling**
Penfield—J. R. Worcester, Hawk & Co. 1.
Rig, 1; well drilling, 1; total, 2.

**WAYNE COUNTY**
**Rigs**
Chester—Catherine Funk, Ohio F. & G. 2.
Milton—John Bannon, E. Ohio Gas 1.
**Wells Drilling**
Chippewa—H. C. Hollinger, Westhaffer & Winger 2.
Paint—Pauline B. Becker, Logan Gas 1.
Congress—C. W. Keener, Glen Harmon & Co. 2.
Chester—P. Firestone, Kemrow Co. 1.
Rigs, 2; wells drilling, 5; total, 7.
Cannan—Daniel Wiles, Butler Bros. 4.

**HOLMES COUNTY**
**Rigs**
Hardy—Delpha Nethrow, Empire G. & F. 5.
Jesse P. Close, Empire G. & F. 4.
**Wells Drilling**
Monroe—Oscar Steele, Empire G. & F. 2.
Oliver M. Smithisler, Ohio Oil 4.
Hardy—J. E. Miller, East Ohio Gas 3.
Etta J. Nowels, East Ohio Gas 1.
Jacob Uhl, East Ohio Gas 5.
John R. Hastings, East Ohio Gas 3.
Delpha Nethrow, Empire G. & F. 3.
Louisa Conn, Kemrow Co. 2.
Geo. Schuler, Warren Palmer & Co. 2.
Geo. Schuler, Burton & Morgan 2.
Salt Creek—Adam Karch, Empire G. & F. 1.
Franklin—Scott V. Mast, Logan Gas 3.
Paint—James P. Miller, Logan Gas 1.
Knox—Catherine Kayler, I. E. O'Hail 1.
Kilbuck—Byron A. Middaugh 18, East Ohio Gas 2.
F. H. & Laura Garver, East Ohio Gas 1.
Frank Galley, East Ohio Gas 1.
L. B. Mohler, Kemrow Oil 1.
Rigs, 2; wells drilling, 18; total, 20.

**ATHENS COUNTY**
**Wells Drilling**
Carthage—C. E. Bradford, Goddard & Cunningham 1.
Oliver Davis, Hawkins & Co. 1.
Eliza Dunlavey, Ohio Fuel Gas 1.
S. S. Hofman, Ohio Fuel Supply 1.
G. D. Swartz, Cooper & Co. 3.
J. W. & Mary Barnhill, Logan Gas 4.
Ida B. Davis, Hendricks & Co. 1.
Waterloo—Lafayette Hewitt, Guenther & Co. 2.
Wells drilling, 8.

**COSHOCTON COUNTY**
**Wells Drilling**
Tiverton—C. E. Humphries, E. Ohio Gas 1.
Newcastle—Cassingham, Cassingham & Bell Bros. 18.
Monroe—Peter Lepley, Empire G. & F. 2.
Jonathan Gant, Ohio Fuel Gas 1.
Wells drilling, 4.

**CUYAHOGA COUNTY**
**Rigs**
Dover—H. L. Rutherford, Logan Gas 1.
E. Linpert, Hulse & Kundtz 1.
G. L. Cooley, Hulse & Kundtz 1.
**Wells Drilling**
Dover, Walter E. Eliott, Logan Gas 2.
Ellen Smith, Logan Gas 1.
F. Clausen, Hulse & Kundtz 1.
M. Lippert, Hulse & Kundtz 1.
J. A. K. Ballasch, Hulse & Kundtz 1.
Kinkler, Dempsey & Daugherty 1.
Kroehle & Co., Arthur & Simpson 1.
Cheskie, McGrath & Co. 1.
J. Gregory, Arthur & Simpson 1.
A. E. Gauge, Arthur & Simpson 1.
C. L. Harrison, Arthur & Simpson 1.
Olmstead—F. K. Biddulph, Simpsin & Co. 1.
Rigs, 3; wells drilling, 12; total, 15.

**JACKSON COUNTY**
**Well Drilling**
Franklin—W. L. Kennison, Logan Gas 2.

**SUMMITT COUNTY**
**Well Drilling**
Richfield—J. B. Kirby, East Ohio Gas 1.

## MICHIGAN FIELDS

**Summary of Field Operations**

| | Comp. | Prod. | Dry Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|
| Saginaw | 21 | 350 | 2 | 12 | 39 | 51 |
| Midland | 1 | 0 | 1 | 0 | 0 | 0 |
| Alcona | 0 | 0 | 0 | 0 | 1 | 1 |
| Total Feb. | 22 | 350 | 3 | 12 | 40 | 52 |
| Total Jan. | 23 | 357 | 3 | 8 | 35 | 43 |
| Difference | 1 | 7 | 0 | 4 | 5 | 9 |

**WELLS COMPLETED**
**SAGINAW COUNTY**
Saginaw—Kaleyter, Wayco Producing 1 ..... 25
Phil Britton, Wm. M. Bradley & Son 1 ..... 20
Dr. D. E. Bradshaw, Sun Oil 2 ..... 5
Geo. Deindorfer, Saginaw Pros. 3 .... 20
John Brechtelsbauer, Saginaw Pros. 1 ..... 20
Chesher, Saginaw Pros. 1 ..... 20
Christian Scherzer, Saginaw Pros. 2.. 20
Bethlehem Church, Superior Oil 1.... 15
Weadock, Superior Oil 1 ..... dry
M. Laundra, Ohio Fuel Corp. 1 ..... 5
Mershon-Eddy-Parker, Ohio Oil 3.... 25
Lehman, Bacon Pet. 1 ..... 20
D. J. McGuire, W. Drig. & Oil 1 .... 15
Community Lease, J. & S. Dev. 1.... 20
Reinhardt, Willex Oil 2 ..... 20
Nickles & Mertz, Mich. Oil & Gas 1.. 15
Palmer, Atlas Oil 1 ..... 25
Benjamine & Weiss St.'s, Star O.I 1.. 20
Pleasant & Hermansau St.'s, Great Lakes Oil 1 ..... 20
Michigan & Weiss St.'s, Fordney Petroleum 1 ..... 20
Birch Run—Mike Courtney, Saval Development 1 ..... dry

Wells completed ..... 21
Production ..... 350
Dry ..... 2

**MIDLAND COUNTY**
Midland—Hlavcak, Saginaw Pros. Co. 1 (Dundee sand 3739 ft.) ..... dry

**SAGINAW COUNTY**
**Rigs**
Saginaw—Ash & Schafer Sts., Cross Pet. 1.
C. R. Phillips, Barker Oil & Gas 2.
Mrs. Carrie Reed, V. M. Vorhees & Co. 1.
Casper Ulrich, Bliss Pet. 6.
C. E. Sperling, Schwinck Oil 1.
Clarence Clark, Wm. M. Bradley & Son 1.
George Griebel, Saginaw Pros. 1.
Deindorfer Woods, Saginaw Pros. 5.
Northmoore Subdivision, Sag. Pros. 3.
Geo. Deindorfer, Saginaw Pros. 4.
Foot State Street, Local Oil 1.
Spaulding—Thos. Holhan, Charles Hunt 1.
**Wells Drilling**
Saginaw—Oakley & Reed Sts., Fordney Petroleum 1.
Nowak-Nelson, Fordney Pet. 1.
Clark & Eddy Sts., Fordney Pet. 1.
Ace Park Grounds, Fordney Pet. 2.
Fred H. Kline & Co., Cross Pet. 1.
Arthur Baumer, Cross Pet. 1.
John Schoentelt, Sun Oil 6.
Nuerminger, Sun Oil 2.
John Stelzreide, Sun Oil 2.
H. Stelzreide, Sun Oil 1.
Rabe, Sun Oil 2.
Fred Engel, Bliss Pet. 2.
Ed. Engel, Bliss Pet. 2.
Nicholas Pappas, Sag. Pros. 1.
Klein-Fox Co., Sag. Pros. 1.
Northmoor Subdivision, Sag. Pros. 2.
Deindorfer Woods, Sag. Pros. 4.
Mershon Vinyard, Sag. Pros. 2.
J. D. Draper Estate, Sag. Pros. 1.
Strable, Strable Salt & Lbr. 1.
Wm. Hagel, Bacon Pet. 1.
Burdow, Edward Bourdow & Co. 1.
Clark & Schafer Sts., J. & S. Dev. 1.
Davenport St., Wells-Schmidt Oil 1.
Whittier, Wells-Schmidt Oil 3.
Oakley Street, Ohio Oil 1.
Mershon-Eddy-Parker, Ohio Oil 1.
Braun, Wayco Oil 1.
J. C. Reed, K. & M. Oil 1.
John Sliva, K. & M. Oil 1.
F. Chesbrough & Co., Crescent Oil 1.
Packing House, Schwinck Oil 2.
Fisher, Ohio Fuel Corp. 4.
Near Eddy & Ash Sts., James Cooper & Co. 1.
Mrs. Barbara Myers, G. & W. Oil 1.
Pleasant & Oakley Sts., W. H. Schallerger & Co. 1.
Buena Vista—Chas. H. Kretchmer, Saval Dev. 1.
Taymouth—Geo. Judd, S. M. Bacon & Co. 1.
Samuel Cedar, S. M. Bacon & Co. 1.
Rige, 12; wells drilling, 39; total, 51.

**ALCONA COUNTY**
**Well Drilling**
Haynes—Section 22, Alcona Pros. 1.

## ILLINOIS FIELDS

**Summary of Field Operations**

| | Com. | Pro. | Dry | Gas | Rigs | Drg. | Ttl. |
|---|---|---|---|---|---|---|---|
| Clark | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| Crawford | 1 | 0 | 0 | 0 | 0 | 7 | 7 |
| Lawrence | 2 | 29 | 0 | 0 | 0 | 6 | 6 |
| Wabash | 1 | 150 | 0 | 0 | 5 | 6 | 11 |
| Madison | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Macon | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Shelby | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Coles | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| Total Feb. | 4 | 180 | 0 | 2 | 5 | 28 | 33 |
| Total Jan. | 15 | 151 | 4 | 0 | 7 | 27 | 34 |
| Difference | 11 | 29 | 4 | 2 | 2 | 1 | 1 |

Two gas wells were completed in Illinois in January.

**WELLS COMPLETED**
**CRAWFORD COUNTY**
Martin—W. L. Hughes, Densmore Oil & Co. 20 ..... 1

**LAWRENCE COUNTY**
Dennison—W. H. Dinning, A. Bruner & Co. 12 ..... 25
Ellen Lutz, The Ohio Oil 9 ..... 4

William Seed No. 1, The Ohio Oil 8, 12 ..... abd

Wells completed ..... 2
Production ..... 29
Abandoned ..... 2

**WABASH COUNTY**

Wabash—J. C. Sparks, Joe S. Young, Jr., & Co. 1 ..... 150

**CLARK COUNTY**
**Wells Drilling**

Casey—Wheeler Baker, W. C. Turner & Co. 3.
James Rush, W. C. McBride, Inc., 27.
Johnson—Norman Bennett, W. C. McBride, Inc., 1.
H. V. Blakeman, W. C. McBride, Inc., 1.
Wells drilling, 4.

**CRAWFORD COUNTY**
**Wells Drilling**

Martin—Ira Renchen, Karne & Co. 7.
J. S. Baker, H. D. Barker & Co. 1.
Honey Creek—Randolph Weger, Craig, Lowrie & Co. 12.
J. E. Cullom, Barlow & Co. 1.
Montgomery—L. N. Tohill, American Oil Development 6.
J. H. Armstrong, Dill & Co. 1.
Licking—P. A. Matheney, Southerland & Co. 1.
Wells drilling, 7.

**LAWRENCE COUNTY**
**Wells Drilling**

Dennison—J. E. Lingenfelder, Kewanee Oil & Gas 24.
L. M. Seed, Big Four Oil & Gas 19.
Bridgeport—J. R. Middagh, The Ohio Oil 23.
Lamotte—I. H. Buzzard, Hartman, Sargent & Co. 1.
Lukin—B. Eason, Frank Ellison 1.
Bond—Charles Gillin, The Ohio Oil 8.
Wells drilling, 6.

**WABASH COUNTY**
**Rigs**

Wabash—Garret Cozine, Ray Uland & Co. 1.
James Schafer, Carl Smith & Co. 1.
B. J. Clark, Phipps & Blosser 1.
Friendsville—A. B. Kern, Miller & Lengelsen 1.
Crum, Miller & Lengelsen 1.
**Wells Drilling**
Wabash—W. M. Price, Risley & Co. 1.
J. C. Sparks, Joe S. Young, Jr., & Co. 2.
C. Litherland, Art Smith & Co. 1.
Kate Keyser, Wirebaugh & Co. 7.
Friendsville—H. C. Yelton, William Bell & Co. 4.
J. C. Wood, Wood Oil 4.
Rigs, 5; wells drilling, 6; total, 11.

**MADISON COUNTY**
**Wells Drilling**

Namcoki—Goodrich, Goodrich Brothers 1.
Pine Oak—Gusweiller, Assembly Oil & Gas 1.
Wells drilling, 2.

**MACON COUNTY**
**Well Drilling**

Hickory Point—A. Parrish, Powers & Co. 1.

**SHELBY COUNTY**
**Well Drilling**

Holland—W. Prosser, A. L. Ginther 1.

**COLES COUNTY**
**Well Drilling**

Ashmore—Luther Houghton, Shrider & Co. 2.

## INDIANA FIELDS

**Summary of Field Operations**

| | Comp. | Prod. | Dry | Rig | Drg. | Ttl. |
|---|---|---|---|---|---|---|
| Blackford | 0 | 0 | 0 | 0 | 1 | 1 |
| Jay | 0 | 0 | 0 | 0 | 2 | 2 |
| Adams | 3 | 45 | 1 | 0 | 4 | 4 |
| Gibson | 1 | 11 | 0 | 5 | 5 | 5 |
| Pike | 5 | 10 | 3 | 0 | 4 | 4 |
| Sullivan | 0 | 0 | 0 | 0 | 2 | 2 |
| Allen | 0 | 0 | 0 | 2 | 1 | 3 |
| Vigo | 0 | 0 | 0 | 0 | 3 | 3 |
| Daviess | 2 | 30 | 0 | 0 | 11 | 11 |
| Knox | 0 | 0 | 0 | 0 | 1 | 1 |
| Dubois | 0 | 0 | 0 | 0 | 1 | 1 |
| Benton | 0 | 0 | 0 | 0 | 1 | 1 |
| Johnson | 0 | 0 | 0 | 0 | 2 | 2 |
| Madison | 0 | 0 | 0 | 0 | 1 | 1 |
| Martin | 0 | 0 | 0 | 0 | 1 | 1 |
| Monroe | 0 | 0 | 0 | 1 | 1 | 1 |
| Spencer | 0 | 0 | 0 | 0 | 1 | 1 |
| Warrick | 0 | 0 | 0 | 0 | 2 | 2 |
| Howard | 1 | 0 | 1 | 0 | 0 | 0 |
| Perry | 0 | 0 | 0 | 0 | 1 | 1 |
| Bartholomew | 0 | 0 | 0 | 0 | 2 | 2 |
| Total Feb. | 12 | 96 | 5 | 3 | 46 | 49 |
| Total Jan. | 13 | 174 | 5 | 3 | 42 | 45 |
| Difference | 1 | 78 | 0 | 0 | 4 | 4 |


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**Wells Completed**
**ADAMS COUNTY**

Jefferson—Joe M. Peel, McKelvey & Co. 3 ..... 40
Wabash—John H. Hilty, Robt. Maybeer 1 ..... 5
A. Adair, Russell & Co. 1 ..... dry

Wells completed ..... 3
Production ..... 45
Dry ..... 1

**GIBSON COUNTY**

Washington—John Zimmerman, Ohio Oil Co. 10 ..... 11

**PIKE COUNTY**

Logan—Walter Wilson, Chas. Blosser & Co. 1 ..... dry
Sam Blaize, J. Morrisey & Co. 1 ..... dry
Clay—Stewart Bros. Murphy Oil 8 ..... 5
Madison—M. B. Coffman, The Ohio Oil 5 dry
S. J. Thomas, The Ohio Oil 10 ..... 5

Wells completed ..... 5
Production ..... 10
Dry ..... 3

**DAVIESS COUNTY**

Veale—S. Swan, Hartman & Sargent 1 .. 15
Scudder, Hartman & Sargent 1 ..... 15

Wells completed ..... 2
Production ..... 30

**HOWARD COUNTY**

East of Kokomo, J. M. Miller, N. E. Masters 1 ..... dry

**BLACKFORD COUNTY**
**Well Drilling**

Washington—Chas. Barton, Herman & Roberts 1.

**JAY COUNTY**
**Wells Drilling**

Penn—A. C. Brown, Ridenour & Co. 1.
Bear Creek—C. Brinkerhoff, Russell P. Ridenour, trustee 2.
Wells drilling, 2.

**ADAMS COUNTY**
**Wells Drilling**

Jefferson—Wm. Smitley, Richberne Oil 4.
Blue Creek—Geo. Schrank, Paul Schulte & Co. 3.
Wabash—Dr. Wilson, Haines & Co. 3.
Monroe—Stengle & Craig, R. S. Anderson & Co. 2.
Wells drilling, 4.

**GIBSON COUNTY**
**Wells Drilling**

Washington—Marguret A. Mauck, Gray Morrisey & Co.
Frank Thompson, Bell Bros. 1.
Veirling heirs, Euclid Oil 4.
Montgomery—John Enlow, John Enlow & Co. 1.
Center—Marge D. Hollingsworth, Mann & Huber 2.
Wells drilling, 5.

**PIKE COUNTY**
**Wells Drilling**

Logan—Wm. Miley, Morrisey & Co. 1.
Pink Atkinson, Alex Singer & Co. 1.
Marion Miley, Buery, Wadson & Co. 1.
Ern Wilson, Wiser Oil 2.
Wells drilling, 4.

**SULLIVAN COUNTY**
**Wells Drilling**

Fairbanks—South of Thomas — Unknown parties 1.
Turman—James Huff, G. G. Billman & Co. 1.
Wells drilling, 2.

**ALLEN COUNTY**
**Rigs**

Maumee—D. Helmke, Robinson, Bros. & Innis 3.
J. T. Butt, Estes, Manion & Co. 3.
**Wells Drilling**
Maumee—M. Roamake, Schuran Oil 1.
Rigs, 2; wells drilling, 1; total, 3.

**VIGO COUNTY**
**Wells Drilling**

Riley—Sec. 14-11-8, E. D. Fagan & Co. 1.
Prairie Creek—Wm. Riggs, Sioni Oil 1.
Jas. A. Stout, The Ohio Oil 1.
Wells drilling, 3.

**DAVIESS COUNTY**
**Wells Drilling**

Veale—Batchelor, Hartman & Sargent 1.
Stanton Barber, Phipps & Blosser 1.
Barber, Bell Bros. 1.
T. Ragsdale heirs, Peek Oil 2.
Allison, Cavinal & Co. 1, 2.
Wonders, Thorne Oil & Gas 1.
Crosby, Bell Bros. 1.
Corning—Caho, Thorne Oil & Gas 1.
Comback—Ike Purcell, Unknown parties 1.
S. E. Part County, Robinson & Co. 1.
Wells drilling, 11.

**KNOX COUNTY**
**Well Drilling**

Posey—Jas. Keyser, Western Gulf Oil 1.

**DUBOIS COUNTY**
**Well Drilling**

Cass—Wm. Meissner, Wheeler & Co. 1.

**BENTON COUNTY**
**Well Drilling**

S. W. Part County—Jesse Voliva, Chicago parties 1.

**JOHNSON COUNTY**
**Wells Drilling**

Franklin—McQuiston, Universal Development 1.
South of Actin—Unknown parties 1.
Wells drilling, 2.

**MADISON COUNTY**
**Well Drilling**

Pendleton—Willie Little, Pendleton Natural Gas 1.

**MARTIN COUNTY**
**Well Drilling**

Loogoottee—Kenner Dilley, Loogoottee Light & Fuel 2.

**MONROE COUNTY**
**Rig**

Polk—Saddle Creek Oil 2.

**SPENCER COUNTY**
**Well Drilling**

Jackson—Dr. Hoover, D. D. Flannagan 1.

**WARRICK COUNTY**
**Wells Drilling**

Pidgeon—Veck-Folson, Turner Oil & Gas 2.
Chas. Watt, Mullins & Co. 1.
Wells drilling, 2.

**PERRY COUNTY**
**Well Drilling**

Tobinsport—Mrs. Hal Weatherholt, Chancellor & Co. 1.

**BARTHOLOMEW COUNTY**
**Wells Drilling**

Wayne—Granville W. H. Lee 1.
Ham Creek—Unknown parties 1.
Wells drilling, 2.


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# Oklahoma-Kansas and Eastern Pipe Line Report

### OKLAHOMA-KANSAS
**Pipe Line Statement for January**

**Runs**

| Company— | Month | Dy.Ave. |
|---|---|---|
| *Prairie P. L. Co. | 4,340,000 | 140,000 |
| Gulf P. L. Co. | 1,378,740 | 44,476 |
| Texas P. L. Co. | 729,724 | 23,539 |
| Magnolia Pet. Co. | 1,618,217 | 52,201 |
| Empire P. L. Co. | 978,713 | 31,571 |
| Cosden P. L. Co. | 874,641 | 28,214 |
| Sinclair P. L. Co. | 2,021,913 | 65,223 |
| *Other lines | 12,152,000 | 392,000 |
| Total January | 24,093,948 | 777,224 |
| Total December | 21,543,154 | 694,941 |
| Difference | 2,550,794 | 82,283 |

**Shipments**

| Company— | Month | Dy.Ave. |
|---|---|---|
| †Prairie P. L. Co. | 4,850,793 | 156,477 |
| Gulf P. L. Co. | 1,272,109 | 41,036 |
| Texas P. L. Co. | 552,425 | 17,820 |
| Magnolia Pet. Co. | 1,462,529 | 47,178 |
| Empire P. L. Co. | 718,643 | 23,182 |
| Cosden P. L. Co. | 889,518 | 28,694 |
| †Sinclair P. L. Co. | 2,615,441 | 84,369 |
| *Other lines | 10,912,000 | 352,000 |
| Total January | 23,273,458 | 750,756 |
| Total December | 20,901,529 | 674,242 |
| Difference | 2,371,929 | 76,514 |

**Stocks**

| | |
|---|---|
| *Prairie Oil & Gas Co. | 28,195,000 |
| *Prairie P. L. Co. | 2,000,000 |
| Gypsy Oil Co. and Gulf P. L. | 7,421,895 |
| The Texas Company | 3,190,163 |
| Magnolia Petroleum Co. | 3,284,287 |
| Empire P. L. Co. | 2,588,657 |
| Cosden P. L. Co. | 2,314,159 |
| *Sinclair Crude Oil Purchasing Co. | 18,400,000 |
| Carter Oil Co. | 14,016,439 |
| *Other lines | 9,000,000 |
| Total January | 90,410,600 |
| Total December | 88,414,470 |
| Difference | 1,996,130 |

*Estimated. †Sinclair shipments include Wyoming and Texas oil, and Prairie shipments include Texas oil.

Note—Stocks do not include approximately 4,600,000 bbls. of crude oil held in private tank farms and leases, and 2,250,000 bbls. of Texas Panhandle crude in storage in Kansas and Oklahoma.

### EASTERN PIPELINES
**Runs From Wells**

In the following table will be found the regular receipts from wells by various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for January and February:

| | Jan. '27 | Feb. '27 |
|---|---|---|
| Nat. Transit | 131,633.26 | 139,482.60 |
| S. W. Pa. P. L. | 91,671.32 | 86,131.61 |
| Eureka P. L. | 356,257.54 | 360,073.04 |
| Buckeye P. L. (Macksburg) | 306,320.21 | 306,133.22 |
| Buckeye P. L. (Cleveland) | 8,898.60 | 9,641.18 |
| Buckeye P. L. (Lima, etc.) | 105,316.84 | 118,289.53 |
| Indiana P. L. | 7,885.73 | 10,308.90 |
| Cumberland P. L. | 269,494.29 | 253,098.35 |
| N. Y. Transit | 20,624.12 | 20,720.01 |
| Tide Water P. L. | 164,816.27 | 166,244.50 |
| Pure Oil | 181,623.77 | 150,656.96 |
| Emery P. L. | 51,721.92 | 50,806.49 |
| Paragon Dev. | 29,152.24 | 27,518.82 |
| Pittsburgh P. L. | 4,492.56 | 5,450.00 |
| Stoll Ref. | 12,571.47 | 11,799.41 |
| Total | 1,742,480.14 | 1,716,345.62 |
| Daily average | 56,209.04 | 61,298.06 |

Note: Indian Refining Co. also reported other receipts of 318,692.38 bbls. Paragon Refining Co. had other receipts of 111,806.74 bbls. Paragon Development had other receipts of 1,727.51 bbls. Pure Oil had other receipts of 23,458.34 bbls.

**Petroleum Deliveries**

The following tables exhibit the shipments or regular deliveries of various pipe lines in New York, Pennsylvania, West Virginia, Ohio, Kentucky and Indiana for January and February:

| | Jan. '27 | Feb. '27 |
|---|---|---|
| Nat. Transit | 339,689.42 | 301,540.53 |
| S. W. Pa. P. L. | 376,678.56 | 332,520.45 |
| Eureka P. L. | 185,046.54 | 189,772.61 |
| Buckeye P. L. (Macksburg) | 152,046.86 | 143,321.85 |
| Buckeye P. L. (Cleveland) | 728.46 | 735.84 |
| Buckeye P. L. (Lima, etc.) | 836,059.08 | 766,275.55 |
| Indiana P. L. | 996,930.49 | 899,418.14 |
| Cumberland P. L. | 170,916.10 | 149,258.83 |
| N. Y. Transit | 268,721.23 | 134,606.31 |
| Northern P. L. | 146,042.27 | 149,470.27 |
| Tide Water P. L. | 142,906.68 | 118,783.21 |
| Pure Oil | 185,495.89 | 187,941.11 |
| Emery P. L. | 56,726.35 | 48,549.33 |
| Paragon Ref. | 162,514.12 | 125,377.69 |
| Indian Ref. | 327,021.57 | 296,038.10 |
| Paragon Dev. | 26,199.57 | 29,126.84 |
| Pittsburgh P. L. | 4,316.92 | 6,213.32 |
| Total | 4,378,040.11 | 3,878,949.98 |
| Daily average | 141,227.10 | 138,533.93 |

**Gross Stocks**

The gross stocks held by various pipe lines in the oil producing sections of New York, Pennsylvania, West Virginia, Ohio, Indiana and Kentucky, at the close of January and February were as follows:

| | Jan. '27 | Feb. '27 |
|---|---|---|
| Nat. Transit | 968,639.67 | 1,009,705.83 |
| S. W. Pa. P. L. | 783,090.22 | 746,374.61 |
| Eureka P. L. | 1,283,959.42 | 1,326,061.87 |
| Buckeye P. L. (Macksburg) | 418,744.17 | 435,819.09 |
| Buckeye P. L. (Cleveland) | 60,087.54 | 76,981.10 |
| Buckeye P. L. (Lima, etc.) | 3,048,645.04 | 3,227,532.22 |
| Indiana P. L. | 563,842.08 | 584,982.76 |
| Cumberland P. L. | 584,088.08 | 606,176.77 |
| Southern P. L. | 418,089.38 | 420,485.22 |
| N. Y. Transit | 576,728.60 | 661,277.88 |
| Northern P. L. | 423,641.24 | 426,553.78 |
| Pure Oil | 472,351.27 | 459,193.89 |
| Emery P. L. | 6,125.26 | 6,932.77 |
| Paragon Ref. | 38,841.67 | 24,907.55 |
| Indian Ref. | 66,887.83 | 91,489.53 |
| Paragon Dev. | 10,670.92 | 11,007.61 |
| Pittsburgh P. L. | 4,170.61 | 3,679.88 |
| Total | 9,718,003.00 | 10,119,162.36 |
| Increase | 263,490.81 | 401,159.36 |

**Grades of Oil**

The following table shows the amount of the different grades of oil held by the eastern pipe lines at the close of January and February, showing the gross stocks of the above fields:

| | Jan. '27 | Feb. '27 |
|---|---|---|
| Pennsylvania | 3,703,521.72 | 3,708,705.44 |
| Lima | 741,567.39 | 798,170.33 |
| Kentucky | 1,034,892.99 | 1,056,674.37 |
| Mid-Continent | 4,134,204.33 | 4,451,184.17 |
| Illinois | 103,816.57 | 104,428.05 |
| Total | 9,718,003.00 | 10,119,162.36 |

**Daily Average Runs**

The following table shows the daily average runs of the Pennsylvania, Lima and Kentucky oil fields for the past four years:

| | 1924 | 1925 | 1926 | 1927 |
|---|---|---|---|---|
| January | 62,638 | 56,831 | 55,630 | 56,209 |
| February | 68,023 | 60,606 | 60,394 | 61,298 |
| March | 68,721 | 60,575 | 61,644 | ..... |
| April | 71,058 | 63,062 | 63,019 | ..... |
| May | 63,942 | 59,232 | 60,580 | ..... |
| June | 63,230 | 61,270 | 64,131 | ..... |
| July | 64,208 | 62,639 | 63,206 | ..... |
| August | 59,942 | 59,686 | 61,815 | ..... |
| September | 62,930 | 62,510 | 64,639 | ..... |
| October | 64,976 | 60,995 | 62,704 | ..... |
| November | 56,282 | 59,350 | 61,774 | ..... |
| December | 55,814 | 57,974 | 58,755 | ..... |

**Daily Average Shipments**

The following table gives daily average shipments from the Pennsylvania, Lima and other fields for the past four years:

| | 1924 | 1925 | 1926 | 1927 |
|---|---|---|---|---|
| January | 146,518 | 157,889 | 156,056 | 141,227 |
| February | 148,732 | 160,863 | 159,488 | 138,534 |
| March | 147,098 | 154,591 | 150,239 | ..... |
| April | 147,611 | 151,429 | 152,371 | ..... |
| May | 134,997 | 146,995 | 160,998 | ..... |
| June | 143,010 | 149,467 | 160,267 | ..... |
| July | 124,187 | 161,338 | 160,945 | ..... |
| August | 123,120 | 161,730 | 151,929 | ..... |
| September | 127,325 | 156,719 | 158,915 | ..... |
| October | 123,170 | 145,388 | 161,132 | ..... |
| November | 124,400 | 143,582 | 152,668 | ..... |
| December | 151,392 | 150,162 | 136,428 | ..... |

**Gross Stocks**

In the following table will be found the gross stocks of the various lines of the Pennsylvania, Lima and Kentucky oil fields, including oil received from other lines at the close of each month for the past three years:

| | 1925 | 1926 | 1927 |
|---|---|---|---|
| January | 11,353,276 | 9,859,170 | 9,718,003 |
| February | 11,192,924 | 9,579,354 | 10,119,162 |
| March | 11,158,297 | 9,438,292 | ..... |
| April | 11,062,082 | 9,805,851 | ..... |
| May | 11,207,562 | 9,531,757 | ..... |
| June | 11,093,796 | 9,585,904 | ..... |
| July | 11,067,453 | 9,734,687 | ..... |
| August | 10,974,481 | 9,668,947 | ..... |
| September | 10,781,763 | 9,423,732 | ..... |
| October | 11,086,850 | 9,269,806 | ..... |
| November | 11,068,158 | 9,257,667 | ..... |
| December | 10,458,445 | 9,454,512 | ..... |

**Franklin Pipe Line Co.**

The following table exhibits the condition of the Franklin Pipe Line Co. at the close of business for the months named and not counted in the stocks and averages reported above.

| 1926— | Runs | Shipmts. | Stocks |
|---|---|---|---|
| February | 2,580.23 | 2,776.19 | 12,819.45 |
| March | 2,754.62 | 1,732.77 | 13,841.30 |
| April | 3,137.49 | 4,519.68 | 12,459.02 |
| May | 2,933.29 | 2,096.35 | 13,296.96 |
| June | 3,217.62 | 1,655.15 | 14,858.42 |
| July | 3,025.86 | 4,075.11 | 13,809.18 |
| August | 2,886.59 | 2,121.21 | 14,574.56 |
| September | 2,788.18 | 3,373.06 | 13,985.68 |
| October | 2,991.86 | 2,307.75 | 14,671.25 |
| November | 2,810.60 | 1,664.55 | 15,817.31 |
| December | 2,847.52 | 5,561.11 | 13,103.72 |
| 1927— | | | |
| January | 2,641.54 | 1,470.42 | 14,274.84 |
| February | 2,764.30 | 1,082.82 | 15,956.32 |

**The Illinois Field**

The following table gives the report of the Illinois Pipe Line Co. in Illinois:

| | |
|---|---|
| Gross stocks, March 1 | 2,661,980.68 |
| Runs from wells | 570,400.72 |
| Other receipts | 426,905.04 |
| Regular deliveries | 402,206.85 |
| Other deliveries | 591,721.73 |

The amount of Illinois oil run by the Tide Water Pipe Co. in February was 26,430.44 bbls. and deliveries were 74,750.38 bbls. Adding these figures to those of the Illinois Pipe Line Co. makes the runs and deliveries as follows:

| 1926— | Runs | Deliveries |
|---|---|---|
| February | 632,611.99 | 506,319.51 |
| March | 753,300.74 | 524,626.96 |
| April | 610,957.04 | 487,604.00 |
| May | 682,416.67 | 498,466.90 |
| June | 693,102.34 | 558,054.94 |
| July | 713,490.66 | 490,092.83 |
| August | 701,795.92 | 555,766.89 |
| September | 688,798.66 | 516,083.06 |
| October | 681,648.96 | 531,467.39 |
| November | 651,263.33 | 498,439.97 |
| December | 668,909.58 | 587,947.61 |
| 1927— | Runs | Deliveries |
| January | 621,421.03 | 530,085.98 |
| February | 595,831.16 | 476,950.71 |

The Tide Water Pipe Co., Ltd., Iaso delivered in February, 249,851.65 bbls.

## AVERAGE DAILY RECEIPTS OF CALIFORNIA OIL AT ATLANTIC AND GULF PORTS

| Average bbls. per day— | ATLANTIC PORTS | | | | | | GULF COAST PORTS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Baltimore | Boston | New York | Philadelphia | Others | Total | Galveston | New Orleans Baton Rouge | Port Arthur Sabine Pass | Tampa | Total | Total All Ports |
| October | 13,742 | 10,258 | 37,000 | 5,936 | 18,355 | 85,290 | ..... | ..... | ..... | 742 | 742 | 86,032 |
| November | 5,400 | 16,600 | 27,633 | 23,533 | 17,300 | 91,467 | ..... | ..... | ..... | ..... | ..... | 91,467 |
| December | 13,645 | 7,139 | 39,645 | 7,419 | 9,774 | 77,613 | ..... | ..... | ..... | ..... | ..... | 77,613 |
| January | 5,097 | 8,258 | 26,290 | 15,932 | 14,807 | 70,355 | ..... | ..... | ..... | 806 | 806 | 71,161 |

## AVERAGE DAILY IMPORTS OF PETROLEUM AT PRINCIPAL UNITED STATES PORTS

| Average bbls. per day— | ATLANTIC PORTS | | | | | | GULF COAST PORTS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Baltimore | Boston | New York | Philadelphia | Others | Total | Galveston | New Orleans Baton Rouge | Port Arthur Sabine Pass | Tampa | Total | Total All Ports |
| October | 20,452 | 6,935 | 67,542 | 5,516 | 20,916 | 131,323 | 10,129 | 29,516 | 3,839 | 5,419 | 48,930 | 170,256 |
| November | 14,867 | 7,167 | 55,967 | 5,700 | 27,433 | 111,133 | 18,133 | 35,200 | 2,600 | 2,900 | 58,733 | 169,866 |
| December | 12,484 | 10,613 | 54,129 | 7,453 | 34,964 | 110,742 | 12,546 | 40,742 | 2,903 | 10,839 | 67,032 | 177,774 |
| January | 16,032 | 8,226 | 64,387 | 4,065 | 31,064 | 123,774 | 7,903 | 43,629 | ..... | 4,123 | 55,645 | 179,419 |

## GROSS PRODUCTION OF THE UNITED STATES FOR 12 MONTHS

(IN BARRELS)

| 1926— | | California | Oklahoma | Texas | Kansas | Arkansas | Louisiana | Rocky Mountains | Eastern Fields | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| February: | Month | 17,163,963 | 12,392,016 | 5,943,232 | 2,891,812 | 4,756,836 | 1,584,184 | 2,778,605 | 2,931,000 | 54,441,648 |
| | Daily average | 612,999 | 442,572 | 355,115 | 103,279 | 169,887 | 56,578 | 99,236 | 104,678 | 1,944,345 |
| March: | Month | 18,825,786 | 14,312,886 | 11,014,238 | 3,334,837 | 5,115,837 | 1,889,636 | 3,161,250 | 3,349,000 | 61,003,520 |
| | Daily average | 603,283 | 458,803 | 353,298 | 107,577 | 165,027 | 60,956 | 101,976 | 108,032 | 1,967,536 |
| April: | Month | 18,091,771 | 14,468,190 | 10,799,760 | 3,330,120 | 5,127,510 | 1,959,570 | 3,233,404 | 3,183,000 | 60,191,325 |
| | Daily average | 603,059 | 482,273 | 359,992 | 111,004 | 170,917 | 65,319 | 104,239 | 2,006,367 | |
| May: | Month | 18,667,144 | 14,607,908 | 11,940,797 | 3,516,640 | 5,482,939 | 2,231,938 | 3,459,489 | 3,317,000 | 63,123,955 |
| | Daily average | 602,166 | 467,968 | 385,187 | 113,440 | 176,869 | 71,998 | 111,596 | 107,000 | 2,036,224 |
| June: | Month | 18,269,417 | 14,073,510 | 11,782,200 | 3,346,470 | 5,064,760 | 2,206,830 | 3,437,905 | 3,366,000 | 61,546,092 |
| | Daily average | 608,981 | 469,117 | 392,740 | 111,549 | 168,822 | 73,561 | 114,597 | 112,167 | 2,051,536 |
| July: | Month | 18,743,199 | 14,657,482 | 13,983,759 | 3,582,267 | 5,019,892 | 2,173,813 | 3,336,664 | 3,420,000 | 64,917,076 |
| | Daily average | 604,619 | 472,822 | 451,089 | 115,557 | 161,932 | 70,123 | 107,634 | 110,323 | 2,094,099 |
| August: | Month | 18,765,080 | 14,618,236 | 17,093,586 | 3,681,436 | 4,878,191 | 2,190,739 | 3,457,697 | 3,339,500 | 68,024,465 |
| | Daily average | 605,325 | 471,556 | 551,406 | 118,756 | 157,361 | 73,896 | 111,538 | 107,726 | 2,194,338 |
| September: | Month | 18,104,954 | 14,466,510 | 17,580,100 | 3,450,060 | 4,803,230 | 2,079,840 | 3,141,123 | 3,330,000 | 66,755,817 |
| | Daily average | 603,498 | 482,217 | 586,003 | 115,002 | 153,441 | 69,328 | 104,704 | 111,000 | 2,225,194 |
| October: | Month | 18,966,058 | 15,730,689 | 19,001,328 | 3,714,637 | 4,625,138 | 2,166,559 | 3,071,720 | 3,398,000 | 70,664,189 |
| | Daily average | 611,808 | 507,119 | 612,946 | 119,827 | 149,198 | 69,889 | 99,088 | 109,613 | 2,279,490 |
| November: | Month | 19,173,128 | 16,376,950 | 18,538,160 | 3,593,490 | 4,399,480 | 2,054,911 | 2,942,587 | 3,216,000 | 70,649,706 |
| | Daily average | 639,104 | 562,565 | 619,772 | 119,783 | 143,216 | 68,497 | 94,762 | 107,200 | 2,354,990 |
| December: | Month | 20,276,950 | 17,382,908 | 19,752,591 | 3,654,156 | 4,266,189 | 2,018,734 | 2,658,301 | 3,313,000 | 73,323,830 |
| | Daily average | 654,095 | 576,868 | 637,213 | 117,876 | 137,619 | 65,130 | 85,752 | 106,871 | 2,381,414 |
| 1927— | | | | | | | | | | |
| January: | Month | 20,184,872 | 19,030,745 | 18,546,990 | 3,668,323 | 4,076,469 | 1,905,570 | 2,610,303 | 3,332,500 | 73,355,772 |
| | Daily average | 651,125 | 613,895 | 598,290 | 118,333 | 131,499 | 61,471 | 84,203 | 107,500 | 2,366,314 |
| | Total 12 months | 225,232,322 | 183,007,130 | 180,032,801 | 41,764,298 | 57,316,471 | 24,462,324 | 37,187,048 | 39,494,000 | 788,496,294 |
| | Daily average | 617,075 | 501,389 | 493,241 | 114,423 | 157,031 | 67,020 | 101,882 | 108,203 | 2,160,264 |

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Deliveries
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| Total All Ports |
|---|
| 86,033 |
| 91,467 |
| 77,615 |
| 71,161 |

| Total All Ports |
|---|
| 170,526 |
| 169,866 |
| 177,774 |
| 179,419 |

| Total |
|---|
| 54,441,648 |
| 1,944,345 |
| 51,003,530 |
| 1,967,536 |
| 60,191,326 |
| 2,006,327 |
| 63,122,956 |
| 2,036,224 |
| 61,546,092 |
| 2,051,536 |
| 64,917,076 |
| 2,094,099 |
| 68,024,465 |
| 2,194,336 |
| 66,755,817 |
| 2,225,194 |
| 70,664,180 |
| 2,279,490 |
| 70,649,700 |
| 2,354,990 |
| 73,823,820 |
| 2,381,414 |
| 73,356,772 |
| 2,366,316 |
| 88,496,304 |
| 2,160,244 |

# Emergency Service

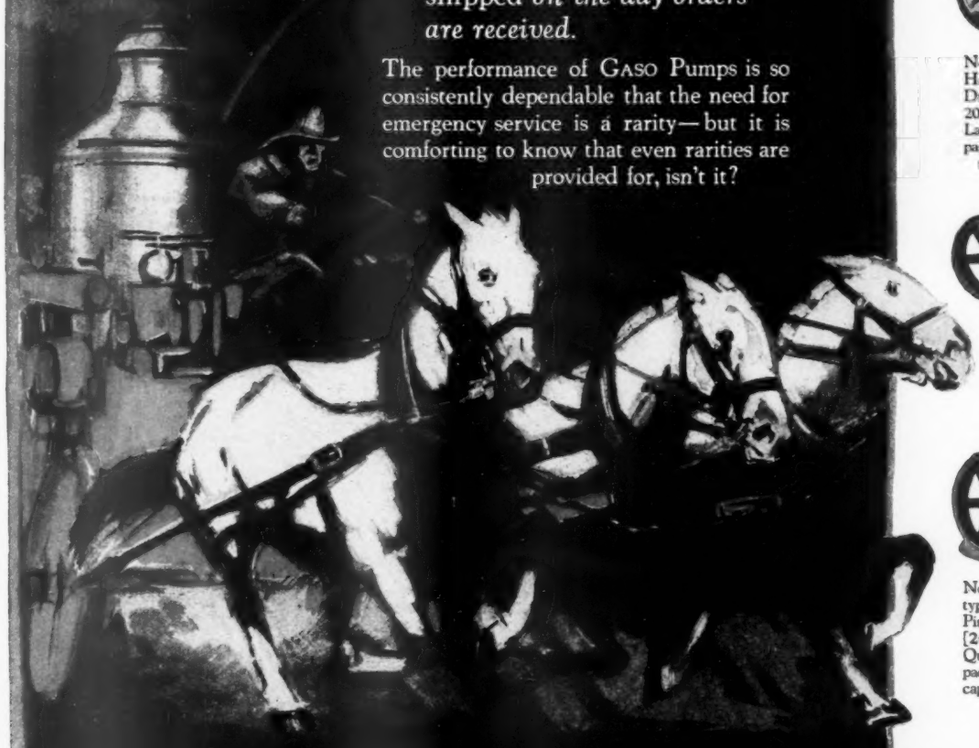
*In* seeking to guard your company against the possibility of serious breakdowns in pumping service, here are three things to keep in mind—

GASO Pumps have *fewer* and *stronger* parts.

The GASO plant is in *Tulsa*.

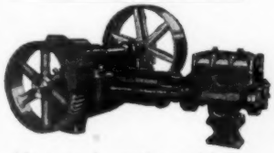
As a rule, GASO parts are shipped *on the day orders are received.*

The performance of GASO Pumps is so consistently dependable that the need for emergency service is a rarity—but it is comforting to know that even rarities are provided for, isn't it?



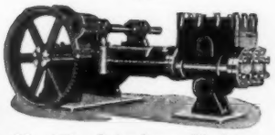
## GEAR-DRIVEN PUMPS

*Geared to Long Life and Real Service*



No. 501—A popular model Gaso Horizontal Duplex Piston Gear-Driven Power Pump, designed for 200 to 800 pound working pressures. Large, direct, unobstructed fluid passages and valve areas; simple design; *fewer* and *stronger* parts.

No. 507—Gaso Horizontal Duplex Piston Gear-Driven Power Pump, especially suited to *suction* service. Ideal for large capacity low-pressure work. Valves and parts easily accessible. *Fewer* and *stronger* parts.



No. 508—*Interchangeable liner* type of Gaso Horizontal Duplex Piston Gear-Driven Power Pump [200 to 800 pound pressures]. Quickly changeable from large capacity low-pressure service to small capacity high-pressure service. *Fewer* and *stronger* parts.

• • • • •

GASO PUMP & BURNER MFG. CO.

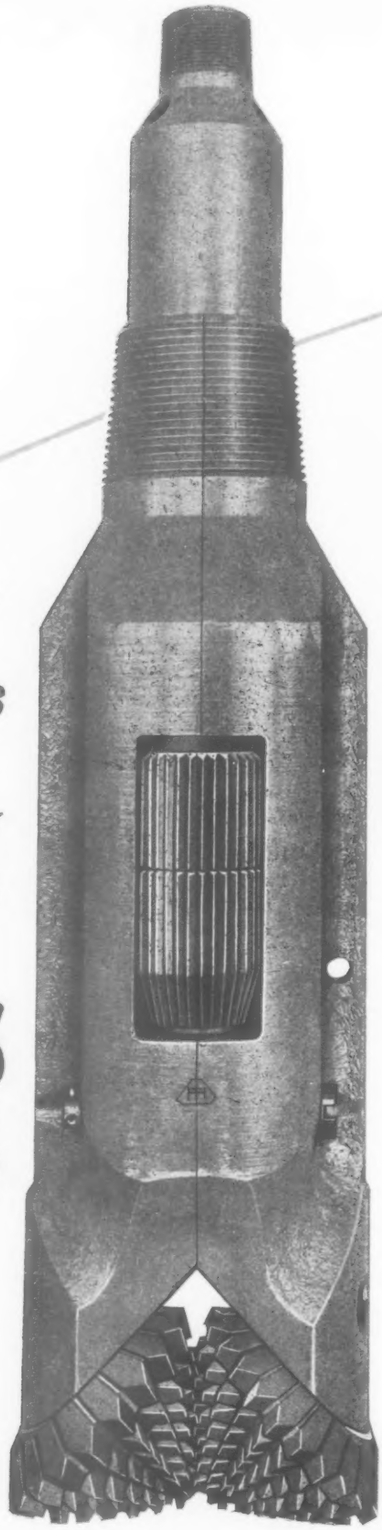
*Tulsa • Oklahoma*

# GASO PUMPS

## *for every oil industry need*

The four main reasons for the satisfactory performance of

# HUGHES TOOLS



Design ~~~
Material ~~
Workmanship
Inspection ~

*Sold By Supply Stores Everywhere*

## HUGHES TOOL COMPANY

*Service Plants:*
*Los Angeles, Calif.*
*Oklahoma City, Okla.*

*Main Office and Plant:*
*HOUSTON, TEXAS*

*Export Office:*
*New York City*